

# Professional Online Academy Vu Topper RM



## CS604-Operating System

### Update MCQ'S Mid Term

### By Vu Topper RM



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**Question No:1**

**(Marks:1)**

**Vu-Topper RM**

Ali is an operating system designer. One user requirement regarding OS is easy to debug and modify. In your opinion which one of the following OS structure Ali needs to follow?

- A. Layered Approach**
- B. Simple OS Approach
- C. Micro kernels
- D. Virtual Machines

**Question No:2**

**(Marks:1)**

**Vu-Topper RM**

Delay is not allowed in which type of system?

- A. Real time system**
- B. Batch System
- C. Single User System
- D. Time sharing System

**Question No:3**

**(Marks:1)**

**Vu-Topper RM**

You can use the rm file1 command to \_\_\_\_\_ file1.

- A. remove**
- B. modify
- C. make
- D. retrieve

**Question No:4**

**(Marks:1)**

**Vu-Topper RM**

Software solution to critical section problem can run only in environment \_\_\_\_\_.

- A. Separate address spacing
- B. Multiprocessor
- C. Multithreading
- D. Uniprocessor**

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**Question No:5**

**(Marks:1)**

**Vu-Topper RM**

Ali is an operating system designer. One user requirement regarding OS is easy to debug and modify. In your opinion which one of the following OS structure Ali needs to follow?

- A. Simple OS Approach
- B. Layered Approach
- C. Micro kernels**
- D. Virtual Machines

**Question No:6**

**(Marks:1)**

**Vu-Topper RM**

Delay is not allowed in which type of system?

- A. Time sharing System
- B. Real time system**
- C. Batch System
- D. Single User System

**Question No:7**

**(Marks:1)**

**Vu-Topper RM**

The procedure “The time at which the process finished working MINUS the arrival time of the process MINUS CPU burst for that process” will help calculate the \_\_\_\_\_.

- A. FCFS
- B. RR Scheduling
- C. Preemptive Shortest Job First scheduling.**
- D. Non-preemptive Shortest Job First scheduling.

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**Question No:8**

**(Marks:1)**

**Vu-Topper RM**

Consider three processes in scheduling .Here are the waiting times for the three processes  $P_1 = 4$ ;  $P_2 = 2$ ;  $P_3 = 6$ . Which one of the following is correct average waiting time per process?

- A. 6
- B. 4**
- C. 2
- D. 3

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**Question No:9**

**(Marks:1)**

**Vu-Topper RM**

In the bakery algorithm to solve the critical section problem

- A. Each process receives a number (may or may not be unique) and the one with the lowest number is served next Page 102**
- B. Each process is put into a queue and picked up in an ordered manner
- C. Each process gets a unique number and the one with the lowest number is served next
- D. Each process gets a unique number and the one with the highest number is served next

**Question No:10**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ is a solution to critical section problem.

- A. Safety algorithm
- B. Banker's algorithm
- C. Dijkstra's algorithm
- D. Lamport's bakery algorithm**

**Question No:11**

**(Marks:1)**

**Vu-Topper RM**

Keep in mind scheduling algorithm, when you go to any famous fast food franchise .On entering the store, each customer receives a number. The customer with the lowest number is served next. This algorithm is called-----.

- A. Simple algorithm
- B. Bakery algorithm Page 102**
- C. Dijkstra algorithm
- D. Deadlock algorithm

**Question No:12**

**(Marks:1)**

**Vu-Topper RM**

In Unix/Linux environment Ali want to know the number of processes running on the system and their status, number of CPUs in the system

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and their usage, amount of main memory and its usage. Which of the following command will help in this regard?

- A. \$ ps
- B. \$ gcc
- C. \$ top**
- D. \$ fifo

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**Question No:13**

**(Marks:1)**

**Vu-Topper RM**

A process having multiple threads of control implies \_\_\_\_\_

- A. it has to use only one thread per process
- B. it can't do library call
- C. it can do only one task at a time, but much faster
- D. it can do more than one task at a time**

**Question No:14**

**(Marks:1)**

**Vu-Topper RM**

Which of the following is not True for a time-sharing system?

- A. Multi user
- B. Interactive
- C. Rigid time requirements**
- D. CPU sit idle when a process requires I/O operation

**Question No:15**

**(Marks:1)**

**Vu-Topper RM**

The main characteristic of a Real time system is

- A. Efficiency
- B. Usability**
- C. Large Virtual Memory
- D. Large secondary storage device

**Question No:16**

**(Marks:1)**

**Vu-Topper RM**

In indirect communication between processes P and Q \_\_\_\_\_

- A. A link is associated with exactly two processes
- B. There is a mailbox to help communication between P and Q**

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- C. There is another machine between the two processes to help communication
- D. There is another process R to handle and pass on the messages between P and Q

**Question No:17** (Marks:1) **Vu-Topper RM**

Which is not considered a role of an operating system?

- A. Program execution
- B. Protection of a user's files and directories
- C. Synchronization of cooperating processes**
- D. Memory allocation and de-allocation of a process

**Question No:18** (Marks:1) **Vu-Topper RM**

Given below two statements can be categorized in some sort of message passing techniques. This type is named as \_\_\_\_\_. Send (A, message) •Receive (B, message)

- A. Send by copy communication
- B. Explicit buffering
- C. Synchronization
- D. Direct communication**

**Question No:19** (Marks:1) **Vu-Topper RM**

\_\_\_\_\_ view is that operating system is a resource manager.

- A. Down-up
- B. Single-up
- C. Top-down
- D. bottom-up**

**Page 3**

**Question No:20** (Marks:1) **Vu-Topper RM**

The kernel is a computer program that manages \_\_\_\_\_ requests from software

- A. Process
- B. Software

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C. Hardware

**D. Input/output**

**Question No:21**

**(Marks:1)**

**Vu-Topper RM**

If size of a process is 376052 bytes and its smallest physical memory address is 242785. Its address space cannot exceed beyond \_\_\_\_\_.

A. 376053

B. 618836

**C. 618837**

D. 376051

**Question No:22**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ commands in Linux is used to copy file

A. Is

**B. Cp**

C. Mv

D. Mkdir

**Question No:23**

**(Marks:1)**

**Vu-Topper RM**

How many modes are supported in operating system?

A. 1

**B. 2**

C. 3

D. 4

**Question No:24**

**(Marks:1)**

**Vu-Topper RM**

First \_\_\_\_\_ entries in Per Process File Descriptor Table are used as soon as the process is created.

A. 1

B. 2

**C. 3** **Page 52**

D. 4

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**Question No:25**

**(Marks:1)**

**Vu-Topper RM**

In Unix/Linux environment, Ayesha wants to know the complete picture of current processes in her session. Which of the following command will help her in this regard?

**E. \$ ps**      **Page 63**

F. \$ gcc

G. \$ top

H. \$ fifo

**Question No:26**

**(Marks:1)**

**Vu-Topper RM**

To display all processes \_\_\_\_\_ option is used with ps command.

A. -l

**B. -e**      **Page 53**

C. -u

D. -a

**Question No:27**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ commands in Linux helps to create a new directory.

A. ls

B. cp

C. mv

**D. Mkdir**      **Page 26**

**Question No:28**

**(Marks:1)**

**Vu-Topper RM**

When processes are generated using fork () system call and then after that they are coordinated with each other using IPC channel. They are utilizing a separate address space for each of process (parent, child),, kernel resources and IPC channel. This makes it a more heavy. Which strategy can be used to make it light?

**A. Use of thread**      **Page 67**

B. Use of batch systems

C. Scheduling of each process

D. Termination of child process when these become more

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**Question No:29**

**(Marks:1)**

**Vu-Topper RM**

The file descriptor for Standard input (stdin) is \_\_\_\_\_

**A. 0** **Page 52**

B. 1

C. 2

D. 3

**Question No:30**

**(Marks:1)**

**Vu-Topper RM**

Which is not a parameter of pthread\_create().

A. Function

B. Thread ID

**C. Return status**

**Page 73**

D. Thread attributes

**Question No:31**

**(Marks:1)**

**Vu-Topper RM**

Which could not be the advantage of thread?

A. Economical

B. Quick response

**C. Separate address space** **Page 69**

D. Best in multiprocessing environment

**Question No:32**

**(Marks:1)**

**Vu-Topper RM**

In round-robin (RR) scheduling algorithm the CPU scheduler goes around the ready queue, allocating the CPU to each process for a time interval of up to \_\_\_\_\_ time quantum.

**A. 1** **Page 85**

B. 2

C. 3

D. 4

**Question No:33**

**(Marks:1)**

**Vu-Topper RM**

The kernel is \_\_\_\_\_ user threads.

A. Is part of

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B. Aware of

**C. Unaware of** Page 70

D. The creater of

**Question No:34**

(Marks:1)

Vu-Topper RM

As a result of <Ctrl-C>, a SIGINT signal is sent to a process. Signal number for SIGINT is \_\_\_\_\_.

A. 1

**B. 2** Page 66

C. 9

D. 15

**Question No:35**

(Marks:1)

Vu-Topper RM

The segment of code in which the process may change common variables, update tables, write into files is known as \_\_\_\_\_

A. Program

B. Synchronizing

**C. Critical section** Page 102

D. Non-critical section

**Question No:36**

(Marks:1)

Vu-Topper RM

\_\_\_\_\_ are lowest prioritized processes for scheduling in Kernel Group.

**A. User processes** Page 90

B. Block I/O control processes

C. File manipulation processes

D. Character I/O device control processes

**Question No:37**

(Marks:1)

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The scheduling of \_\_\_\_\_ are done by the operating system.

**A. Kernel threads** Google

B. User level threads

C. Both

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D. None of these

**Question No:38**

**(Marks:1)**

**Vu-Topper RM**

Which of the following information is not displayed with top command?

- A. Nice value
- B. CPU Usage
- C. Top processes

**D. Number of threads in a process**      **Page 64**

**Question No:39**

**(Marks:1)**

**Vu-Topper RM**

To terminate a process <ctrl-c> is pressed, which signal it actually pass to process for termination?

- A. SIGINT**
- B. SIGKILL
- C. SIGTRAP
- D. SIGTERM

**Page 66**

**Question No:40**

**(Marks:1)**

**Vu-Topper RM**

UNIX System V scheduling uses queues, which run \_\_\_\_\_ algorithm.

- A. Round Robin**
- B. Shortest Job First
- C. First Come First Serve
- D. Shortest Remaining Time First

**Page 90**

**Question No:41**

**(Marks:1)**

**Vu-Topper RM**

The solution type where in critical section we use “entry section and “exit section” is called kind of \_\_\_\_\_.

- A. Assumption
- B. Hardware solution
- C. Software Solution**
- D. Operating System Solution

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**Question No:42**

**(Marks:1)**

**Vu-Topper RM**

Which of the following is used to show the end of file in unix?

A. Ctrl+A

**B. Ctrl+D** Google

C. Ctrl+O

D. Ctrl+E

**Question No:43**

**(Marks:1)**

**Vu-Topper RM**

The nice value helps in assigning \_\_\_\_\_ to a process.

A. Time

B. Weight

**C. Priority** Google

D. Scheduling

**Question No:44**

**(Marks:1)**

**Vu-Topper RM**

Critical section problem can be solved by using how many ways?

A. 1

B. 2

**C. 3** Page 97

D. 4

**Question No:45**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ is a piece of code in a cooperating process in which the process may updates shared data (variable, file, database, etc.).

A. Critical Path

B. Critical Code

**C. Critical section** Page 97

D. Critical Analysis

**Question No:46**

**(Marks:1)**

**Vu-Topper RM**

When process opens its first file explicitly it will get descriptor number

A. 1

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**B. 3**      **Google**

C. 5

D. 7

**Question No:47**      **(Marks:1)**      **Vu-Topper RM**  
\_\_\_\_\_ scheduling algorithm is sometimes called shortest remaining time first scheduling algorithm.

A. FCFS

B. Priority scheduling

C. Non-preemptive SJF

**D. Preemptive Shortest Job First**      **Page 82**

**Question No:48**      **(Marks:1)**      **Vu-Topper RM**  
\_\_\_\_\_ displays information about the top processes.

A. Is

B. Cs

C. Cd

**D. Top**      **Page 64**

**Question No:49**      **(Marks:1)**      **Vu-Topper RM**  
POSIX is a standard developed by \_\_\_\_\_

A. ISO

B. ACM

**C. IEEE**      **Google**

D. ANSI

**Question No:50**      **(Marks:1)**      **Vu-Topper RM**  
\_\_\_\_\_ is the basis of queuing theory which is branch of mathematics used to analyze systems involving queues and servers.

A. Queuing Theory

**B. Little's Formula**      **Page 93**

C. Queuing Analysis

D. Deterministic Modeling

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**Question No:51**

**(Marks:1)**

**Vu-Topper RM**

Batch programs are usually \_\_\_\_\_ programs.

- A. Interactive
- B. Foreground
- C. Preemptive
- D. Non-interactive**

**Google**

**Question No:52**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ scheduling algorithm can be preemptive or non-preemptive.

- A. Priority
- B. Round Robin
- C. Shortest Job First**
- D. First Come First Serve

**Page 82**

**Question No:53**

**(Marks:1)**

**Vu-Topper RM**

Round Robin algorithm is most suitable for \_\_\_\_\_.

- A. Expert system
- B. Time sharing system**
- C. Running batch progress
- D. Real time system and batch systems

**Page 85**

**Question No:54**

**(Marks:1)**

**Vu-Topper RM**

A major problem with priority- scheduling algorithms is \_\_\_\_\_.

- A. Aging
- B. Deadlock
- C. Nice value
- D. Starvation**

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**Question No:55**

**(Marks:1)**

**Vu-Topper RM**

Kernel is responsible for scheduling the user level threads.

- A. False**
- B. True

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**Question No:56**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ scheduling allows a process to move between queues.

- A. Round Robin
- B. First Come First Serve
- C. Multilevel Feedback Queue**
- D. Shortest Remaining Time First

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**Question No:57**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ command display the status of a process.

- A. Is
- B. Ps**
- C. Cat
- D. Gcc

**Page 63**

**Question No:58**

**(Marks:1)**

**Vu-Topper RM**

The correct command for compiling C program named program.c in LINUX environment is

- A. gcc -z FirstProgram program.c
- B. gcc program.c -m FirstProgram
- C. gcc -o FirstProgram program.c
- D. gcc program.c -o First Program**

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**Question No:59**

**(Marks:1)**

**Vu-Topper RM**

In critical section problem \_\_\_\_\_ requirement illustrates that, "If no process is executing in its critical section and some processes wish to enter their critical sections, then only those processes that are not executing in their remainder section can participate in the decision on which will enter its critical section next, and this selection cannot be postponed indefinitely."

- A. Progress**
- B. Slow execution
- C. Mutual exclusion

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D. Bounded waiting

**Question No:60**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ are used by shell commands to pass data from one shell pipeline to another, without creating temporary files.

A. Pipes

**B. FIFOs**

**Page 58**

C. BSD sockets

D. Message queues

**Question No:61**

**(Marks:1)**

**Vu-Topper RM**

When a process P1 switches from the running state to the waiting state because an I/O request is being completed. This scheduling is called-----

----

A. Switching

B. Preemptive

C. Termination

**D. Non primitive**

**Page 79**

**Question No:62**

**(Marks:1)**

**Vu-Topper RM**

Performance measures of scheduling algorithms are calculated with \_\_\_\_\_ using Gantt charts, in order to evaluate an algorithm for a particular workload.

A. Simulation

B. Queuing Models

C. Analytic evaluation

**D. Deterministic modeling**

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**Question No:63**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ scheduling can be made into a processor sharing approach.

**A. Round robin**

**Page 86**

B. Shortest Job First

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- C. First Come First serve
- D. Shortest remaining time

**Question No:64** (Marks:1) **Vu-Topper RM**

CPU bound processes are scheduled before short or I/O bound processes in \_\_\_\_\_ scheduling, therefore, resulting in less CPU and device utilization.

- A. Round Robin
- B. Shortest Job First
- C. First Come First Serve** **Page 80**
- D. Shortest Remaining Time First

**Question No:65** (Marks:1) **Vu-Topper RM**

A shell command mkfifo can be used to create a /an -----.

- A. Pipe
- B. Named pipe** **Page 57**
- C. Unnamed pipe
- D. Message queue

**Question No:66** (Marks:1) **Vu-Topper RM**

Preemptive SJF (Shorted Job First) scheduling is sometimes called \_\_\_\_\_ scheduling.

- A. Biggest time-first
- B. Shortest time-last
- C. Smallest time-first
- D. Shortest remaining – time first** **Page 82**

**Question No:67** (Marks:1) **Vu-Topper RM**

Multilevel feedback \_\_\_\_\_ scheduling allows a process to move between queues.

- A. List
- B. Time
- C. Array

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**D. Queue**      **Page 89**

**Question No:68**      **(Marks:1)**      **Vu-Topper RM**  
\_\_\_\_\_ are used to show executions of processes.

- A. Quantum
- B. Sequence
- C. Time slice

**D. Gantt charts**      **Page 85**

**Question No:69**      **(Marks:1)**      **Vu-Topper RM**  
The ready queue in RR (Round Robin) scheduling algorithm is referred to as \_\_\_\_\_.

- A. Time Slice
- B. Time Quantum

**C. Circular queue**      **Page 85**

- D. LIFO (Last in First Out)

**Question No:70**      **(Marks:1)**      **Vu-Topper RM**  
The time it takes for the dispatcher to stop one process and start another running is known as the \_\_\_\_\_.

- A. Stop time
- B. Sleep time
- C. Dispatch time

**D. Dispatch latency**      **Page 79**

**Question No:71**      **(Marks:1)**      **Vu-Topper RM**  
Kill command is used to terminate a process. The syntax of the command is kill [-signal] PID When executed without a signal number, the command sends the \_\_\_\_\_ signal to the process.

- A. SIGINT
- B. SIGKILL

**C. SIGTERM**      **Page 66**

- D. None of the these

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**Question No:72**

**(Marks:1)**

**Vu-Topper RM**

We can terminate a thread explicitly by either returning from the thread function or by using the \_\_\_\_\_ call.

- A. win()
- B. slow()
- C. express()

**D. pthread\_exit()**

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**Question No:73**

**(Marks:1)**

**Vu-Topper RM**

Concurrent processes must be synchronized to prevent \_\_\_\_\_.

- A. Waiting
- B. Critical Section

**C. Race condition**

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D. Mutual exclusion

**Question No:74**

**(Marks:1)**

**Vu-Topper RM**

In process management, some of the jobs can be suspended for some time in order to give other jobs a chance to be in execution. Which command can be used to place back a suspended program?

- A. Ps
- B. Bg

**C. Fg**

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D. Top

**Question No:75**

**(Marks:1)**

**Vu-Topper RM**

In critical section problem \_\_\_\_\_ requirement illustrates that, “There exists a bound on the number of times that other processes are allowed to enter their critical sections after a process has made a request to enter its critical section and before that request is granted.”

- A. Progress
- B. Race Condition
- C. Mutual Exclusion

**D. Bounded waiting**

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**Question No:76**

**(Marks:1)**

**Vu-Topper RM**

A ----- signal is generated when a write performed to fifo that no process is opened for reading.

A. SIGFIFO

**B. SIGPIPE** **Page 58**

C. Named PIPE

D. Unnamed PIPE

**Question No:77**

**(Marks:1)**

**Vu-Topper RM**

Clock interrupt handler is an example of kernel thread that is not executed for servicing a request by a user thread .It is named as -----  
---

**A. LWP** **Page 72**

B. POSIX

C. EINVAL

D. EAGAIN

**Question No:78**

**(Marks:1)**

**Vu-Topper RM**

Four processes P1, P2, P3, P4 enter the ready queue at time 0 with burst times P1=3, P2=10, P3=4. Waiting time of P3 would be \_\_\_\_\_.

A. 12

**B. 13**

C. 14

D. 17

**Question No:79**

**(Marks:1)**

**Vu-Topper RM**

The time interval from submission of a process to the time when its output is generated is termed as.

A. CPU burst

B. Throughput

C. Responsive time

**D. Turnaround time** **Page 80**

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**Question No:80**

**(Marks:1)**

**Vu-Topper RM**

Critical section is a place where certain shared structure is updated. Its solution required certain precaution; one of them is the access to critical section by one process at a time only. What this condition is termed as?

- A. Progress
- B. Entry section
- C. Bounded waiting

**D. Mutual exclusion**

**Page 97**

**Question No:81**

**(Marks:1)**

**Vu-Topper RM**

In critical section problem, each process must first request permission to enter its critical section. The section of code implementing this request is called the \_\_\_\_\_.

- A. Sub section
- B. Exit section

**C. Entry section**

**Page 97**

D. Remainder section

**Question No:82**

**(Marks:1)**

**Vu-Topper RM**

UNIX system V Scheduling algorithm in every second, the priority number of all those processes that are in the main memory and ready to run is updated by using the following formula:

- A. Priority # = Threshold priority + nice
- B. Priority # = (Recent CPU Usage)/2 + nice
- C. Priority # = (Recent CPU Usage)/2 + Threshold priority

**D. Priority #=(Recent CPU Usage)/2+Threshold priority+nice**

**Page 90**

**Question No:83**

**(Marks:1)**

**Vu-Topper RM**

The number of processes completed per unit time is called \_\_\_\_\_.

**A. Throughput**

**Page 80**

B. Response time

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- C. Dispatch latency
- D. Turn around time

**Question No:84**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ is used in real time operating systems.

- A. FCFS scheduling
- B. Dispatching scheduling
- C. Preemptive scheduling**
- D. Non-preemptive scheduling

**Question No:85**

**(Marks:1)**

**Vu-Topper RM**

Which of the following is a correct command line for running in background?

- A. cat code.c | grep print @
- B. cat code.c | grep print &**
- C. cat code.c | grep print #
- D. cat code.c | grep print %

**Page 62**

**Question No:86**

**(Marks:1)**

**Vu-Topper RM**

Consider three processes in scheduling .Here are the waiting times for the three processes  $P1 = 5$ ;  $P2 = 10$ ;  $P3 = 3$ . Which one of the following is correct average waiting time per process?

- A. 2
- B. 3
- C. 6**
- D. 8

**Question No:87**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ is not a system call in Linux.

- A. Read
- B. Open
- C. Mknod
- D. Mkfifo**

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**Question No:88**

**(Marks:1)**

**Vu-Topper RM**

Processes P1, P2, P3, P4 enter the ready queue at times 0, 3, 3, 11 with burst times P1=8, P2=2, P3=1, P4=1. With Shortest Remaining Time First, \_\_\_\_\_ process is given CPU at time T=3.

- A. P1
- B. P2
- C. P3**
- D. P4

**Question No:89**

**(Marks:1)**

**Vu-Topper RM**

The priority of a process can be changed using \_\_\_\_\_ command.

- A. Cat
- B. Nice**
- C. Cmd
- D. Grep

**Question No:90**

**(Marks:1)**

**Vu-Topper RM**

Processes P1, P2, P3 having burst times P1=3, P2=4, P3=3 and turnaround times P1=7, P2=10, P3=9 enter the ready queue at T=0. With RR scheduling, waiting time for process P2 would be \_\_\_\_\_.

- A. 0
- B. 3
- C. 4
- D. 6**

**Question No:91**

**(Marks:1)**

**Vu-Topper RM**

The problem with priority scheduling algorithm is \_\_\_\_\_.

- A. Aging
- B. Deadlock
- C. Nice value
- D. Starvation**

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**Question No:92**

**(Marks:1)**

**Vu-Topper RM**

In process synchronization, if both the producer and consumer attempt to update the buffer concurrently, the machine language statements may get interleaved. Interleaving depends upon how the producer and consumer processes are \_\_\_\_\_.

- A. Stopped
- B. Separated
- C. Scheduled**
- D. Interrupted

**Page 96**

**Question No:93**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ processes or threads often need access to shared data and shared resources.

- A. Single
- B. Parallel
- C. Temporary
- D. Concurrent**

**Page 95**

**Question No:94**

**(Marks:1)**

**Vu-Topper RM**

In Unix/ Linux, by default the standard output file is attached to the \_\_\_\_\_

- A. File
- B. Printer
- C. Screen**
- D. Scanner

**Question No:95**

**(Marks:1)**

**Vu-Topper RM**

In round-robin (RR) scheduling algorithm, in case the time quantum is very large (infinite), the RR policy remains the same as the \_\_\_\_\_ policy.

- A. LIFO (Last in First out)
- B. SJF (Shorted Job First)
- C. FCFS (First Come First Server)**

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D. SRTF (Shortest Remaining Time First)

**Question No:96**

**(Marks:1)**

**Vu-Topper RM**

Critical section problem is to \_\_\_\_\_ the concurrent execution of cooperating process.

- A. Stop
- B. Start
- C. Update

**D. Serialize**

**Page 102**

**Question No:97**

**(Marks:1)**

**Vu-Topper RM**

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

- A. Aging**
- B. Sleeping
- C. Stopping
- D. Awaking

**Page 84**

**Question No:98**

**(Marks:1)**

**Vu-Topper RM**

In multilevel queue-scheduling algorithm the highest priority is given to \_\_\_\_\_.

- A. batch processes
- B. system processes
- C. interactive processes**
- D. interactive editing processes

**Question No:99**

**(Marks:1)**

**Vu-Topper RM**

Co-operating processes sharing a piece of code are executed periodically to solve \_\_\_\_\_.

- A. Aging problem
- B. Waiting problem
- C. Critical section problem**
- D. Non-concurrency problem

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**Question No:100**

**(Marks:1)**

**Vu-Topper RM**

The child process can \_\_\_\_\_

- A. Be a duplicate of the parent process**
- B. Never be a duplicate of the parent process
- C. Never have another program loaded into it
- D. Cannot have another program loaded into it

**Page 36**

**Question No:101**

**(Marks:1)**

**Vu-Topper RM**

The BSD sockets are used for communication between related or unrelated processes on the same system or \_\_\_\_\_ on different systems.

- A. Sibling process
- B. Related processes
- C. Unrelated processes**
- D. Both (related and unrelated)

**Page 50**

**Question No:102**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ scheduler takes the process from the ready queue and assign the CPU with the help of Dispatcher.

- A. Swapper
- B. Long term
- C. Short term**
- D. Medium-term

**Page 79**

**Question No:103**

**(Marks:1)**

**Vu-Topper RM**

Which of the following provide interface to access the services of the operating system?

- A. API
- B. Library call
- C. System call**
- D. Assembly Instructions

**Page 15**

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**Question No:104**

**(Marks:1)**

**Vu-Topper RM**

This layered approach is taken to its logical conclusion in the concept of a \_\_\_\_\_ .

- A. Logical Machine
- B. Virtual machine**
- C. Physical Machine
- D. None of the these

**Page 19**

**Question No:105**

**(Marks:1)**

**Vu-Topper RM**

Taking the CPU from one process and giving the CPU to another process is termed as

- A. Tracking
- B. Swapping
- C. Dispatching
- D. Context Switching**

**Page 31**

**Question No:106**

**(Marks:1)**

**Vu-Topper RM**

The region in the memory that a process is allowed to access is known as process \_\_\_\_\_ .

- A. Register
- B. Operation
- C. Instruction
- D. Address Space**

**Page 10**

**Question No:107**

**(Marks:1)**

**Vu-Topper RM**

A signal is an event generated to get attention of

- A. Trap
- B. Process**
- C. Interrupts
- D. Hard disk

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**Question No:108**

**(Marks:1)**

**Vu-Topper RM**

The creating process is called a \_\_\_\_\_ process while the new processes are called the \_\_\_\_\_ of that process

- A. Zombie, single
- B. Children, parent
- C. Parent, children**
- D. None of the given

**Page 35**

**Question No:109**

**(Marks:1)**

**Vu-Topper RM**

In \_\_\_\_\_ inter process communication, a sender mention the name of the recipient.

- A. Direct**
- B. Indirect
- C. Automatic
- D. Synchronous

**Page 43**

**Question No:110**

**(Marks:1)**

**Vu-Topper RM**

For undivided and uninterrupted testing and setting of semaphore, uni-processor systems tend to \_\_\_\_\_.

- A. Use signal
- B. Use spinlock
- C. Disable Interrupt**
- D. Use bakery algorithm

**Page 109**

**Question No:111**

**(Marks:1)**

**Vu-Topper RM**

The \_\_\_\_\_ approach include the ease of extending the OS.

- A. Small Kernel
- B. Micro Kernel**
- C. Macro Kernels
- D. Monolithic Kernel

**Page 19**

**Question No:112**

**(Marks:1)**

**Vu-Topper RM**

For reading input, which of the following system call is used?

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A. Rd

**B. Read** Page 45

C. Write

D. Change

**Question No:113**

**(Marks:1)**

**Vu-Topper RM**

Which of the following statement is not true regarding the cooperating processes?

**A. It may affect or be affected by any other process executing in system** Page 41

B. It provides an environment to allow concurrent user to access same resources.

C. It provide an environment to run parallel processes to speedup computation.

D. It construct the system in a modular fashion, dividing the system functions into separate processes or threads.

**Question No:114**

**(Marks:1)**

**Vu-Topper RM**

In which of the following system multiple user are allowed to used the computer simultaneously?

A. Two users

B. Three users

**C. Multi users** Page 6

D. Single users

**Question No:115**

**(Marks:1)**

**Vu-Topper RM**

We can perform the solution to critical section problem by allowing only one process to enter at a time but another solution hold some instruction use.one of them is TSL, how it is written in program?

A. TSL ()

B. TSL (Bolean &target)

C. Testandset(Bolean &target)

**D. TestAndSet (Boolean &target)** Page 105

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**Question No:116**

**(Marks:1)**

**Vu-Topper RM**

System calls provide the interface between a \_\_\_\_\_ and the Operating system

- A. User
- B. Kernel
- C. Process**
- D. Machine

**Page 15**

**Question No:117**

**(Marks:1)**

**Vu-Topper RM**

In operating system, \_\_\_\_\_ command is used to copy files to same location or different location.

- A. Cp
- B. Copi
- C. Copy

**D. Both Copy and CP**

**Google**

**Question No:118**

**(Marks:1)**

**Vu-Topper RM**

When sender never block because it has an infinite length storage area, then it means it is holding a queue of \_\_\_\_\_ capacity.

- A. Zero
- B. Defined
- C. Bounded

**D. Unbounded**

**Page 45**

**Question No:119**

**(Marks:1)**

**Vu-Topper RM**

A process is \_\_\_\_\_ if it cannot affect or be affected by any other process executing in the system.

- A. Dependent
- B. Independent**
- C. Both (independent and dependent)
- D. None of the given

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**Question No:120**

**(Marks:1)**

**Vu-Topper RM**

You can have a thread wait for another thread within the same process by using the \_\_\_\_\_ system call.

A. pthread\_exit()

**B. pthread\_join()**

**Page 73**

C. pthread\_create()

D. pthread\_terminate()

**Question No:121**

**(Marks:1)**

**Vu-Topper RM**

State of a process transits from running to ready because of \_\_\_\_\_.

A. I/O

B. Fork()

**C. Interrupt**

**Page 79**

D. Scheduler dispatch

**Question No:122**

**(Marks:1)**

**Vu-Topper RM**

In \_\_\_\_\_ addressing, the recipient is not required to name the sender.

A. Symmetric

**B. Asymmetric**

**Page 44**

C. Both

D. None of these

**Question No:123**

**(Marks:1)**

**Vu-Topper RM**

After fork() system call is made, parent and child process have their separate copy of \_\_\_\_\_.

A. Nice value

B. Environment

**C. File descriptors**

**Page 38**

D. File mode creation mask

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**Question No:124** (Marks:1) **Vu-Topper RM**  
Bounded Buffer is a buffer of \_\_\_\_\_ size  
A. Variable  
**B. Fixed** **Page 41**

**Question No:125** (Marks:1) **Vu-Topper RM**  
The link between two processes P and Q to send and receive messages is called \_\_\_\_\_  
A. Synchronization link  
B. All of the mentioned  
**C. Communication link** **Page 43**  
D. Message-Passing link

**Question No:126** (Marks:1) **Vu-Topper RM**  
\_\_\_\_\_ algorithm is used for solving n-process critical section problem.  
A. Bankers  
**B. Bakery** **Page 102**  
C. Babbles  
D. None of the given

**Question No:127** (Marks:1) **Vu-Topper RM**  
The section of code before the critical section is called \_\_\_\_\_  
A. Exit section  
**B. Entry section** **Page 97**  
C. Crystal section  
D. Remainder section

**Question No:128** (Marks:1) **Vu-Topper RM**  
An operating system is easily portable between varying hardware designs in \_\_\_\_\_ structural approach.  
A. Simple  
B. Layered

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**C. Micro kernels**

**Page 19**

D. Virtual Machines

**Question No:129**

**(Marks:1)**

**Vu-Topper RM**

Which is not basic computing hardware?

A. CPU

B. Memory

C. I/O Devices

**D. Compact Disc**

**Page 1**

**Question No:130**

**(Marks:1)**

**Vu-Topper RM**

The \_\_\_\_\_ defines an operating system as a bridge between computer user and hardware for a user's convenience.

A. System-view

B. Layered-view

**C. Top-down view**

**Page 3**

D. Bottom-up view

**Question No:131**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ system call is used to create a child process.

**A. Fork**

**Page 48**

B. Child

C. Parent

D. None of them

**Question No:132**

**(Marks:1)**

**Vu-Topper RM**

The Operating system is a layer of software between \_\_\_\_\_ and \_\_\_\_\_.

A. Kernel, hardware

B. Dos, Windows

C. Windows, Kernel

**D. Hardware, software application**

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**Question No:133**

**(Marks:1)**

**Vu-Topper RM**

OS helps manages the following except

- A. Memory
- B. Virtual memory
- C. Application software
- D. Bus speed of the system**

**Question No:134**

**(Marks:1)**

**Vu-Topper RM**

In Unix/ Linux, by default the standard input file is attached to the

- A. Mouse
- B. Joystick
- C. Light pen
- D. Keyboard**

**Page 52**

**Question No:135**

**(Marks:1)**

**Vu-Topper RM**

An operating system is a / an \_\_\_\_\_ that manages the execution of user programs to prevent errors and improper use of a computer.

- A. Disk
- B. Physical unit
- C. Control program**
- D. Application program

**Page 3**

**Question No:136**

**(Marks:1)**

**Vu-Topper RM**

In priority-scheduling algorithm equal priority processes are scheduled in \_\_\_\_\_ order.

- A. SJF (Shorted Job First)
- B. LIFO (Last in First Out)
- C. FCFS (First Come First Serve)**
- D. SRTF (Shortest Remaining Time First)

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**Question No:137**

**(Marks:1)**

**Vu-Topper RM**

We can suspend a foreground process by pressing \_\_\_\_\_, which sends a STOP/SUSPEND signal to the process.

- A. Ctrl+ w
- B. Ctrl+ z**
- C. Ctrl+ x
- D. Ctrl+ y

**Page 65**

**Question No:138**

**(Marks:1)**

**Vu-Topper RM**

In producer-Consumer problem synchronization is required. On which shared area this synchronization actually affect?

- A. Buffer**
- B. Counter
- C. Exit section
- D. Entry section

**Page 94**

**Question No:139**

**(Marks:1)**

**Vu-Topper RM**

Using hardware solution to synchronization for complex problems, introduce a new synchronization tool know as \_\_\_\_\_.

- A. Trap
- B. Swap
- C. Semaphore**
- D. TestAndSet

**Page 111**

**Question No:140**

**(Marks:1)**

**Vu-Topper RM**

In instruction TestAndSet mutual exclusion implementation is done by declaring a Boolean variable lock \_\_\_\_\_.

- A. Initialized as 1
- B. Initialized as Zero
- C. Initialized as True
- D. Initialized to False**

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**Question No:141**

**(Marks:1)**

**Vu-Topper RM**

----- is a segment of code that accesses a shared resource like data structure or device that must not be concurrently accessed by more than one thread of execution.

- A. Pipelining
- B. Multithreading
- C. Critical section Page 105**
- D. Context switching

**Question No:142**

**(Marks:1)**

**Vu-Topper RM**

In system call that creates a pipe for IPC. If one of the operation from read/write would fail then what will be returned as result?

- A. -1 Page 46**
- B. 0
- C. -1+1
- D. 1

**Question No:143**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ command is used to change the directory.

- A. Is
- B. Cp
- C. M
- D. Cd Page 219**

**Question No:144**

**(Marks:1)**

**Vu-Topper RM**

The correct command when Pipes are used on the command line to connect the standard input of one process to the standard input of another is \_\_\_\_\_.

- A. Cmd1 \$ cmd2 \$.....\$ cmdN
- B. Cmd1 | cmd2 |.....| cmdN Page 53**
- C. Cmd1 & cmd &.....&cmdN
- D. Cmd1 % cmd2 %.....%cmdN

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**Question No:145**

**(Marks:1)**

**Vu-Topper RM**

When processes communicate with each other, they perform communication through synchronization and utilizing separate address spaces. This action is termed as \_\_\_\_\_

- A. Synchronization
- B. Process management
- C. Direct/indirect Communication

**D. Inter-process communication**

**Page 43**

**Question No:146**

**(Marks:1)**

**Vu-Topper RM**

The \_\_\_\_\_ system call suspends the calling process until one of the immediate children terminate.

**A. Wait**

**Page 39**

- B. Trap
- C. Signal
- D. Interrupt

**Question No:147**

**(Marks:1)**

**Vu-Topper RM**

A \_\_\_\_\_ system has well defined, fixed time constraints, and if the system does not produce output for an input within the time constraints, the system will fail.

- A. Limited
- B. Android
- C. Operating

**D. Real-time**

**Page 7**

**Question No:148**

**(Marks:1)**

**Vu-Topper RM**

The process id returned to the child process after successful fork system call execution is \_\_\_\_\_.

**A. 0**

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- B. 1
- C. 2
- D. 3

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**Question No:149**

**(Marks:1)**

**Vu-Topper RM**

The write () system call may not fail for \_\_\_\_\_reason(s).

**A. Valid argument**

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B. Disk is full

C. Invalid argument

D. File size limit for process or for system would exceed

**Question No:150**

**(Marks:1)**

**Vu-Topper RM**

If a parent exits before terminating its children processes, these children are handed over to \_\_\_\_\_ process.

**A. Init**

**Page 37**

B. Root

C. Sibling

D. Daemon

**Question No:151**

**(Marks:1)**

**Vu-Topper RM**

Shared libraries and kernel modules are stored in \_\_\_\_\_ directory.

**A. /lib**

**Page 23**

B. /bin

C. /dev

D. /boot

**Question No:152**

**(Marks:1)**

**Vu-Topper RM**

A solution to the critical section problem must satisfy the following requirements except

A. Progress

**B. Race Condition**

**Page 98**

C. Bounded Waiting

D. Mutual Exclusion

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**Question No:153**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ is used to request the OS by the process to take an I/O or initiating child process.

- A. Trap
- B. Signal
- C. Interrupt

**D. System Call**

**Page 195**

**Question No:154**

**(Marks:1)**

**Vu-Topper RM**

Linux uses \_\_\_\_\_ directory to store system configuration files.

- A. /etc
- B. /bin
- C. /dev
- D. /boot

**Page 23**

**Question No:155**

**(Marks:1)**

**Vu-Topper RM**

A parent process calling \_\_\_\_\_ system call will be suspended until children processes terminate.

- A. Exit
- B. Fork
- C. Wait
- D. Exec

**Page 36**

**Question No:156**

**(Marks:1)**

**Vu-Topper RM**

If your processor does not have two slots empty in Per Process File Descriptor Table, then your \_\_\_\_\_ system call will fail.

- A. Pipe
- B. Read
- C. Write
- D. Open

**Page 52**

**Question No:157**

**(Marks:1)**

**Vu-Topper RM**

The manual pages can be read in Linux using \_\_\_\_\_ command.

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**A. Man**

**Page 24**

- B. wan
- C. desc
- D. help

**Question No:158**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ directory includes essential system boot files including the kernel image.

- A. /bin
- B. /dev
- C. /etc

**D. /boot**

**Page 23**

**Question No:159**

**(Marks:1)**

**Vu-Topper RM**

Command-line interpreter is also called \_\_\_\_\_ in some operating systems.

- A. API
- B. Shell**
- C. Signal
- D. Kernel

**Google**

**Question No:160**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ command displays the contents of current working directory.

- A. Is**
- B. Cs
- C. Mv
- D. Cp

**Page 25**

**Question No:161**

**(Marks:1)**

**Vu-Topper RM**

A \_\_\_\_\_ is an integer variable that, apart from initialization is accessible only through standard atomic operations.

A. Mutex

**B. Semaphore**

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- C. Busy waiting
- D. Mutual Exclusion

**Question No:162**

**(Marks:1)**

**Vu-Topper RM**

Which part of the computer system helps in managing the file and memory management system?

- A. Hardware
- B. Device Drivers
- C. Operating System**
- D. Application Software

**Page 12**

**Question No:163**

**(Marks:1)**

**Vu-Topper RM**

A/an ----- is software generated call caused by error, or when a user request for an operating system service.

- A. Trap**
- B. Interrupt
- C. Library call
- D. System Call

**Page 7**

**Question No:164**

**(Marks:1)**

**Vu-Topper RM**

A Process 'A' that has finished working but its parent process has also finished its execution. In this state the process 'A' will be called as \_\_\_\_\_ process.

- A. Child
- B. Fork
- C. Thread
- D. Zombie**

**Page 42**

**Question No:165**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ system call is used to write to a file or FIFO or any other IPC channel.

- A. Read

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- B. Open
- C. Fork

**D. Write**      **Page 45**

**Question No:166**      **(Marks:1)**      **Vu-Topper RM**

You can use the rm file1 command to \_\_\_\_\_ file1.

- A. Make
- B. Modify

**C. Remove**      **Page 27**

- D. Retrieve

**Question No:167**      **(Marks:1)**      **Vu-Topper RM**

Using \_\_\_\_\_ system, we can create a new process in Linux.

- A. Exit
- B. Wait

**C. Fork**      **Page 36**

- D. Exec

**Question No:168**      **(Marks:1)**      **Vu-Topper RM**

Which of the following is not a major advantage of multi-programming system is

- A. Jobs can be completed quickly
- B. CPU utilization can be increases
- C. More than one jobs can be processed at a given time

**D. If more process exist, the rest must wait until the CPU is free and can be rescheduled**      **Page 31**

**Question No:169**      **(Marks:1)**      **Vu-Topper RM**

Which of the following are TRUE for direct communication?

- A. Exactly two links exist between each pair of processes

**B. A communication link can be associated with exactly two processes**      **Page 44**

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- C. A communication link can be associated with N number of process (N=maximum number of processes supported by system)
- D. Exactly N/2 links exist between each pair of processes(N=maximum number of processes supported bysystem)

**Question No:170** (Marks:1) **Vu-Topper RM**

Consider a system of N processes (Po, P1 ..... Pn-1). Each process in its critical section and the process may be changing common variables, updating a table, writing a file etc. No other process is allowed to execute in its critical section. This problem is called -----.

- A. Bakery algorithm  
B. N-Mutual exclusion  
C. Deadlock algorithm

**D. N-Process Critical Section** **Page 102**

**Question No:171** (Marks:1) **Vu-Topper RM**

A thread shares its resources (like data section, code section, open files, signals) with \_\_\_\_\_.

- A. Other threads that belong to similar processes  
**B. Other thread that belongs to the same processes** **Page 69**  
C. Other process similar to the one that the thread belongs to  
D. All

**Question No:172** (Marks:1) **Vu-Topper RM**

A program in execution is called a \_\_\_\_\_.

- A. Process** **Page 12**  
B. Software  
C. Compiler  
D. Command

**Question No:173** (Marks:1) **Vu-Topper RM**

\_\_\_\_\_ multi-threading model provides full concurrency.

**A. One -to-One** **Page 71**

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- B. One-to-Many
- C. Many-to-One
- D. Many-to-Many

**Question No:174**

**(Marks:1)**

**Vu-Topper RM**

Rather than maximizing CPU utilization and use of peripheral devices, \_\_\_\_\_ systems are for maximizing user convenience and responsiveness.

- A. Batch
- B. Single-user**
- C. Time-sharing
- D. Multi-user Batch

**Page 4**

**Question No:175**

**(Marks:1)**

**Vu-Topper RM**

Consider a scenario in which one process P1 enters in its critical section, no other process is allowed to execute in its critical section. This is called -----

- A. Progress
- B. Multithreading
- C. Mutual exclusion**
- D. Context switching

**Page 98**

**Question No:176**

**(Marks:1)**

**Vu-Topper RM**

Which process can be affected by other processes executing in the system?

- A. Init process
- B. Child process
- C. Cooperating process**
- D. Parent process

**Page 41**

**Question No:177**

**(Marks:1)**

**Vu-Topper RM**

Linux redirection features can be used to \_\_\_\_\_ and attach other files with them for a single execution of a command.

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- A. detach the default files from stdin and stderr
- B. detach the default files from stdout, and stderr
- C. detach the default files from stdin stdout and stderr**
- D. None of the these

**Question No:178** (Marks:1) **Vu-Topper RM**  
In the results displayed by ls -l command, 5th column shows

- \_\_\_\_\_.
- A. Owner of the file
  - B. Time last updated
  - C. File size in bytes**
  - D. Group of the owner

**Page 26**

**Question No:179** (Marks:1) **Vu-Topper RM**  
In the layered approach of Operating Systems \_\_\_\_\_

- A. Bottom Layer(N) is the hardware
- B. Highest Layer(N) is the Hardwar
- C. Bottom Layer (0) is the user interface
- D. Highest layer (N) is the user interface**

**Page 18**

**Question No:180** (Marks:1) **Vu-Topper RM**  
A heavy weight process \_\_\_\_\_

- A. Multiple or single thread
- B. Has multiple threads of execution
- C. Has a single thread of execution**
- D. None of the these

**Page 67**

**Question No:181** (Marks:1) **Vu-Topper RM**  
FIFO's (also known as named pipes) are used for communication between \_\_\_\_\_ on UNIX/Linux system

- A. Parent-child
- B. Related processes**
- C. Unrelated processes

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D. Related and Unrelated

**Question No:182**

**(Marks:1)**

**Vu-Topper RM**

Which of the following two operations are provided by the IPC facility?

- A. Send & Delete message
- B. Write & Delete message
- C. Delete & Receive message

**D. Receive and send messages**

**Google**

**Question No:183**

**(Marks:1)**

**Vu-Topper RM**

Access of variable Semaphore is possible only through two atomic operation \_\_\_\_\_ and \_\_\_\_\_.

- A. Lock, Key
- B. Wait, signal**
- C. Boolean, integer
- D. Test And Set, Swap

**Page 108**

**Question No:184**

**(Marks:1)**

**Vu-Topper RM**

A \_\_\_\_\_ enables a user process to request the operating system to execute a privileged instruction for it.

- A. Trap**
- B. Interrupt
- C. Library call
- D. System Call

**Page 8**

**Question No:185**

**(Marks:1)**

**Vu-Topper RM**

Is not system call in Linux.

- A. Read
- B. Open
- C. Mknod

**D. MKfifo**

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**Question No:186**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ is also called Swapper.

- A. Long term
- B. Short term
- C. Swap space

**D. Medium term**

**Page 34**

**Question No:187**

**(Marks:1)**

**Vu-Topper RM**

All UNIX and LINUX systems have one thing in common which is

- A. Set of commands
- B. Set of instructions
- C. Set of text editors

**D. Set of system calls**

**Google**

**Question No:188**

**(Marks:1)**

**Vu-Topper RM**

Consider a scenario of CPU protection, ----- is added to the operating system in order to detect and avoid loop in a user program.

- A. I/O
- B. Timer**
- C. Base and limit register
- D. Turning interrupt enable off

**Page 11**

**Question No:189**

**(Marks:1)**

**Vu-Topper RM**

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

- A. ran>academics
- B. cat<academics**
- C. con<academics
- D. socket>academics

**Page 55**

**Question No:190**

**(Marks:1)**

**Vu-Topper RM**

The section of code after the critical section is called \_\_\_\_\_.

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- A. Exit section
- B. Entry section
- C. Crystal section

**D. Remainder section** Page 98

**Question No:191** (Marks:1) **Vu-Topper RM**

Both in two atomic instructions TestAndSet and swap two critical section requirements are satisfied but not \_\_\_\_\_.

- A. Progress
- B. Assumptions
- C. Mutual exclusion

**D. Bounded waiting** Page 106

**Question No:192** (Marks:1) **Vu-Topper RM**

TSL based solution can implement mutual exclusion, it abbreviates \_\_\_\_\_.

- A. Trap Set Solution
- B. Test Set Instrument
- C. Test Swap Instruction

**D. Test and set instruction** Page 106

**Question No:193** (Marks:1) **Vu-Topper RM**

To prevent a process from keeping CPU for too long, control is shifted to another ready process by invoking a timer \_\_\_\_\_.

- A. When running process finishes its task.
- B. When running process makes a system call.

**C. Every time a process finishes its time slice.** Page 11

D. Every time a free space is available in main memory.

**Question No:194** (Marks:1) **Vu-Topper RM**

P1, P2, P3, P4, P5 are five processes with ticket numbers P1=1, P2=2, P3=4, P4=2, P5=4 then considering Lamport's bakery algorithm, \_\_\_\_\_ process enters critical section after P1.

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- A. P2
- B. P3
- C. P1
- D. P4

**Question No:195** (Marks:1) **Vu-Topper RM**

You can use the bg command to put the current or a suspended process into the background. What is the correct syntax of bg command from the following \_\_\_\_\_.

- A. bg [%id]
- B. bg [job#]
- C. bg [id#]

**D. bg[%job-id]** Page 65

**Question No:196** (Marks:1) **Vu-Topper RM**

mkdir command is used to \_\_\_\_\_ an empty directory.

- A. Move
- B. Create
- C. Modify

**D. Remove** Page 27

**Question No:197** (Marks:1) **Vu-Topper RM**

Main memory is \_\_\_\_\_ memory.

- A. Virtual
- B. Volatile**
- C. Permanent
- D. Non-volatile

**Question No:198** (Marks:1) **Vu-Topper RM**

The collection of processes that is waiting on the disk to be brought into the memory for execution forms the -----

- A. Output queue

**B. Input queue** Page 151

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- C. None of the given options
- D. Both input and output queue

**Question No:199**

**(Marks:1)**

**Vu-Topper RM**

The address generated by the CPU, after any indexing or other addressing-mode arithmetic, is called a -----address, and the address it gets translated to by the MMU is called a -----address.

- A. Valid, invalid
- B. Physical, Virtual
- C. Virtual, physical**
- D. Hexadecimal, Binary

**Page 153**

**Question No:200**

**(Marks:1)**

**Vu-Topper RM**

What do we name to an address that is generated by the CPU?

- A. Logical address**
- B. Binary addresses
- C. Physical address
- D. None of the given options

**Page 152**

**Question No:201**

**(Marks:1)**

**Vu-Topper RM**

While using the read/write system call which data type is used to return the size of file to buffer from file descriptor fd?

- A. Fifo
- B. Pipefd
- C. ssize\_t

**D. SIZE\_MAX**

**Page 45**

**Question No:202**

**(Marks:1)**

**Vu-Topper RM**

What do we name to an address that is loaded into the memory-address register of the memory?

- A. Logical address
- B. Physical address**
- C. Binary addresses

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D. None of the given options

**Question No:203**

**(Marks:1)**

**Vu-Topper RM**

----- register contains the size of the process

- A. Base register
- B. Index register
- C. Limit register**      **Page 13**
- D. Stack pointers register

**Question No:204**

**(Marks:1)**

**Vu-Topper RM**

A page table needed for keeping track of pages of the page table is called

-----

- A. Page size
- B. 2-level paging
- C. Page directory**      **Page 173**
- D. Page table size

**Question No:205**

**(Marks:1)**

**Vu-Topper RM**

Physical memory is broken down into fixed-sized blocks, called-----  
- and Logical memory is divided into blocks of the same size, called -----

- A. Pages, frame
- B. Frames, holes
- C. Frames, pages**      **Page 165**
- D. Holes, segments

**Question No:206**

**(Marks:1)**

**Vu-Topper RM**

When a process has undivided access to a shared piece of code then no other process can execute this code, this state is called \_\_\_\_\_.

- A. Progress
- B. Race condition
- C. Bounded waiting
- D. Mutual exclusion**      **Page 98**

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**Question No:207**

**(Marks:1)**

**Vu-Topper RM**

In multi-threaded process thread () take two arguments, they are used to take \_\_\_\_\_ and \_\_\_\_\_.

- A. New thread ID, process name
- B. Register count, program counter
- C. Program counter value, address space limit.

**D. New thread function name, new thread ID**

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**Question No:208**

**(Marks:1)**

**Vu-Topper RM**

Under \_\_\_\_\_ once the CPU has been allocated to a process the process keeps the CPU until either it switches to the waiting state, finishes its CPU burst, or terminates.

- A. Force scheduling
- B. Dynamic scheduling
- C. Preemptive scheduling

**D. Non –preemptive scheduling**

**Page 79**

**Question No:209**

**(Marks:1)**

**Vu-Topper RM**

A time-sharing system is:

- A. Multi-user
- B. Interactive
- C. Multitasking

**D. All of these**

**Page 6**

**Question No:210**

**(Marks:1)**

**Vu-Topper RM**

While a process executes its critical section, other entering processes loop in a continual function in their entry sections, thus causing \_\_\_\_\_.

**A. Busy waiting**

**Page 109**

- B. Race condition
- C. Bounded waiting
- D. Mutual exclusion

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**Question No:211**

**(Marks:1)**

**Vu-Topper RM**

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

- A. Swapper
- B. Short term
- C. Long term**
- D. Medium term

**Page 33**

**Question No:212**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ processes or thread often need access to shared data and shared resources.

- A. Single
- B. Parallel
- C. Temporary
- D. Concurrent**

**Page 95**

**Question No:213**

**(Marks:1)**

**Vu-Topper RM**

In hardware multiprocessor environment two instructions are executed \_\_\_\_\_ which are swap and TestAndSet.

- A. By force
- B. Manually
- C. Atomically**
- D. Automatically

**Page 105**

**Question No:214**

**(Marks:1)**

**Vu-Topper RM**

The \_\_\_\_\_ process creates two FIFOs, FIFO1 and FIFO2, and opens FIFO1 for reading and FIFO2 for writing.

- A. Client
- B. Server**
- C. Both
- D. None of these

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**Question No:215**

**(Marks:1)**

**Vu-Topper RM**

The situation in which no context switching is required in multiprocessor system is referred to as \_\_\_\_\_.

- A. Interrupt
- B. Spin lock**
- C. Scheduler
- D. Busy waiting

**Page 110**

**Question No:216**

**(Marks:1)**

**Vu-Topper RM**

Binary semaphore whose integer value cannot be  $> 1$ ; can be simpler to implement.

- A. Counting**
- B. Binary
- C. Mutex
- D. Bounded buffer

**Google**

**Question No:217**

**(Marks:1)**

**Vu-Topper RM**

Which scheduling algorithm allocates the CPU first to the process that request the CPU first?

- A. Priority scheduling
- B. Shortest job scheduling
- C. First-come, First-served scheduling**
- D. None of the these

**Page 80**

**Question No:218**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ is a preemptive scheduling algorithm.

- A. Round Robin**
- B. None of these
- C. Shortest Job First
- D. First Come First Serve

**Question No:219**

**(Marks:1)**

**Vu-Topper RM**

The priorities of processes in the \_\_\_\_\_ group remain fixed.

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A. User

**B. Kernel** Page 90

C. Both

D. None of these

**Question No:220**

(Marks:1)

Vu-Topper RM

In Unix/Linux by default the standard output file is attached to the

A. File

B. Printer

**C. Screen** Page 52

D. Scanner

**Question No:221**

(Marks:1)

Vu-Topper RM

A dashed line is used to represent a \_\_\_\_\_ in Resource Allocation Graph.

**A. Claim edge** Page 138

B. Request edge

C. Assignment edge

D. Allocation edge

**Question No:222**

(Marks:1)

Vu-Topper RM

The process of holding at least one resource and waiting to acquire additional resources that are currently being held by other processes is known as \_\_\_\_\_.

A. Circular wait

B. No preemption

**C. Hold and wait**

D. Mutual exclusion

**Question No:223**

(Marks:1)

Vu-Topper RM

If the system can allocate resources to each process in some order and still avoid a deadlock then it said to be in \_\_\_\_\_ state.

**A. Safe**

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- B. Unsafe
- C. Mutual
- D. Starvation

**Question No:224**

**(Marks:1)**

**Vu-Topper RM**

Use of semaphore create problem of busy waiting; this wastes CPU cycle that some other process may be able to use productively. This type of semaphore is also called \_\_\_\_\_.

- A. Mutex
- B. Spinlock**
- C. Semaphore
- D. Locking semaphore

**Page 109**

**Question No:225**

**(Marks:1)**

**Vu-Topper RM**

You can use the mv file1 file2 command to move \_\_\_\_\_

- A. File 2to file 1
- B. File1 to file2.**
- C. None of the these
- D. This command will not work for moving files

**Page 27**

**Question No:226**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_ determines How to do something.

- A. Mechanism**
- B. Policy
- C. Mechanism and Policy:
- D. None of the given

**Question No:227**

**(Marks:1)**

**Vu-Topper RM**

Mach, MacOS X Server, QNX, OS/2 and Windows NT are examples of OS Based on \_\_\_\_\_.

- A. Layered
- B. Micro Kernal**

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- C. Virtual Machine
- D. None of The Given

**Question No:228**

**(Marks:1)**

**Vu-Topper RM**

User mode can run the Privileged instructions.

**A. 1 Google**

B. 0

C. 2

D. 4

**Question No:229**

**(Marks:1)**

**Vu-Topper RM**

\_\_\_\_\_command in LINUX is used to copy file.

A. ls

**B. cp Page 27**

C. mv

D. mkdir

**Question No:230**

**(Marks:1)**

**Vu-Topper RM**

The basic purpose of\_\_is to help the users to utilize the hardware resources for completing different task in a simplified manner.

A. All software

**B. Operating system Page 1**

C. Application software

D. All of the given

**Question No:231**

**(Marks:1)**

**Vu-Topper RM**

Keeping in mind scheduling algorithm, when you go to any famous fast food franchise. On entering the store, each customer receive a number. The customer with a lowest number is served next. This algorithm is called\_\_\_\_\_.

A. Simple algorithm

**B. Bakery algorithm Page 102**

C. Dijkstra's algorithm

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D. Deadlock algorithm

**Question No:232**

**(Marks:1)**

**Vu-Topper RM**

The wait operation of the Semaphore basically works on the basic \_\_\_\_\_systemcall.

**A. Wait()**

**Page 111**

B. Stop()

C. Hold()

D. Block()

**Question No:233**

**(Marks:1)**

**Vu-Topper RM**

While using the read /write system call which data type is used to return the size of file to buffer from file descriptor fd?

A. Fifo

B. Ssized

C. Pipefd

**D. Ssize-Max**

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**Question No:234**

**(Marks:1)**

**Vu-Topper RM**

Is a solution of the problem of indefinite blockage of low-priority processes.

**A. Aging**

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B. Deadlock

C. Starvation

D. None of these

**Question No:235**

**(Marks:1)**

**Vu-Topper RM**

Which of the following conditions must be satisfied to solve the critical sectionproblem?

A. Progress

B. Bounded waiting

C. Mutual Exclusion

**D. All of the given**

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**Question No:236**

**(Marks:1)**

**Vu-Topper RM**

~ symbol in the pathname ~/docs/cs604/handouts represents \_\_\_\_\_.

- A. Root directory
- B. Child directory
- C. Login directory**
- D. Parent directory

**Page 22**

**Question No:237**

**(Marks:1)**

**Vu-Topper RM**

The round-robin (RR) scheduling algorithm is designed especially for \_\_\_\_\_.

- A. Nice systems
- B. Batch system
- C. Single-user systems
- D. Time sharing system**

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**Question No:238**

**(Marks:1)**

**Vu-Topper RM**

Semaphore S is a/an\_\_type of variable to use as synchronization tool.

- A. Float
- B. Integer**
- C. Double
- D. Boolean

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**Question No:239**

**(Marks:1)**

**Vu-Topper RM**

We can use semaphore to deal with the number of \_\_\_process critical section problem.

- A. 1
- B. N**
- C. n-1
- D. 2n

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**Question No:240**

**(Marks:1)**

**Vu-Topper RM**

Software section to critical section problem can run only in environment

- A. Multiprocessor

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B. Multithreading

**C. Uniprocessor**

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D. Separate address spacing

**Question No:241**

**(Marks:1)**

**Vu-Topper RM**

View is that operating system is resource manager.

A. Top-down

B. Single-up

C. Down-up

**D. Bottom -up**

**Page 3**

**Question No:242**

**(Marks:1)**

**Vu-Topper RM**

Co-operating process sharing a piece of code are executed periodically to solve

A. Aging problem

B. Waiting problem

C. Non-concurrency

**D. Critical section problem**

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**Question No:243**

**(Marks:1)**

**Vu-Topper RM**

In LINUX directory structure, there is root directory.

**A.1**

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B.2

C.3

D.4

**Question No:244**

**(Marks:1)**

**Vu-Topper RM**

Linux is only single user operating system

**False**

**Page 4**

True

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Question No:245

(Marks:1)

Vu-Topper RM

If a system is not in a safe state, there can be No deadlocks.

True

**False** Page 137

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