

Operating Systems (CS604)

Question: 1 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

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

Choices:

ls

☐

cp

☒

mv

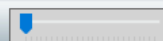
☐

mkdir

☐

TIME LEFT

17



Inter process communication (IPC) allows process to communicate and to synchronize their actions without sharing the same \_\_\_\_\_

Choices:

☒ Address space



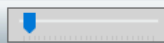
☐ Messages

☐ Pipes

☐ Message Queue

TIME LEFT

17



Operating Systems (CS604)

Question: 3 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

Pipe system call is used to \_\_\_\_\_ a pipe

Choices:

☐ Destroy

☒ Create

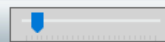
☐ Modify

☐ Clear



TIME LEFT

17



Operating Systems (CS604)

Question: 4 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

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

Choices:

☒ con < academics

☐ cat < academics

☐ socket > academics

☐ ran > academics

Correct Answer Solved By Hadi  
usmanraj20@gmail.com  
03228043306



TIME LEFT

17



Operating Systems (CS604)

Question: 5 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

In a multithreaded model, Which one of the following provides true concurrency?

Choices:

☐ Many-to-one

☐ One-to-one

☒ Many-to-many

☐ One-to-many

Correct Answer Solved By Hadi  
usmanraj20@gmail.com  
03228043306

TIME LEFT

17



Operating Systems (CS604)

Question: 6 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

In \_\_\_\_\_ model, there is a kernel thread for every user thread.

Choices:

☒ One-to-one

Correct Answer Solved By Hadi  
usmanraj20@gmail.com  
03228043306

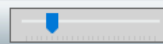
☐ Many -to-one

☐ Many-to-many

☐ One-to-many

TIME LEFT

17



Operating Systems (CS604)

Question: 7 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

\_\_\_\_\_ loads, verifies, and executes programs that have been translated into Java byte code.

Choices:

☒ Java Virtual Machine

☐ VMWare

☐ VM Solution

☐ VM PC

TIME LEFT

16



Operating Systems (CS604)

Question: 8 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

\_\_\_\_\_ is the time taken for the dispatcher to stop one process and start another process.

Choices:

☒ Dispatch latency

Correct Answer Solved By Hadi  
usmanraj20@gmail.com  
03228043306

☐ Scheduling

☐ Context switching

☐ Preemption

TIME LEFT

16





Operating Systems (CS604)

Question: 9 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

A time interval when a process uses CPU only is called \_\_\_\_\_.

Choices:

☐ Scheduling

☐ I/O burst

☒ CPU burst

☐ Dispatch latency

TIME LEFT

16



Operating Systems (CS604)

Question: 10 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

A time interval when a process uses I/O devices only is called \_\_\_\_\_.

Choices:

☐ CPU burst

☒ I/O burst

☐ Scheduling

☐ Context switching

TIME LEFT

16



Operating Systems (CS604)

Question: 11 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

While two processes in execution, only one can be in critical section at a time , this requirement is named as \_\_\_\_\_.

Choices:

☐ Race condition

☒ Mutual exclusion

☐ Progress

☐ Bounded waiting

TIME LEFT

16



Operating Systems (CS604)

Question: 12 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

The file descriptor for Standard Output (stdout) is -----.

Choices:

0

☐

1

☒

Correct Answer Solved By Hadi  
usmanraj20@gmail.com  
03228043306

2

☐

3

☐

TIME LEFT

16



Operating Systems (CS604)

Question: 13 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

The file descriptor for Standard error (stderr) is -----.

Choices:

0

☐

1

☐

2

☒

3

☐

Correct Answer Solved By Hadi  
usmanraj20@gmail.com  
03228043306

TIME LEFT

16



Operating Systems (CS604)

Question: 14 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

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

Choices:

☐ Pipes

☐ Message queues

☐ BSD sockets

☐ FIFOs



TIME LEFT

16



Operating Systems (CS604)

Question: 15 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

Preemptive -----scheduling is sometimes called  
**shortest-remaining-time-first** scheduling.

Choices:

First-Come-First-Served (FCFS)

Round-Robin

Sorted Job First (SJF)

Priority



TIME LEFT

16



Operating Systems (CS604)

Question: 16 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

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

Choices:

☐ First Come First Serve, Round-Robin

☒ Round-Robin, First Come First Serve

☐ Round Robin, Round Robin

☐ First Come First Serve, First Come First Serve

TIME LEFT

16





Operating Systems (CS604)

Question: 17 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

A process terminates by calling the -----system call.

Choices:

☒ wait

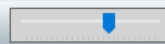
☐ fork

☐ exec

☐ exit

TIME LEFT

16



Operating Systems (CS604)

Question: **18** (Marks: 1)

Attempted Questions: **25** Total Questions: **26**

The syntax for input redirection is

Choices:

☒ command < input-file

Correct Answer Solved By Hadi  
usmanraj20@gmail.com  
03228043306

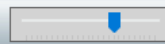
☐ command > input-file

☐ command >= input-file

☐ command =< input-file

TIME LEFT

16



Operating Systems (CS604)

Question: 19 (Marks: 1)

Attempted Questions: 25

Total Questions: 26

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

Choices:

☐ critical section



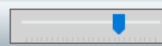
☐ critical region

☐ monitor

☐ semaphore

TIME LEFT

16



Operating Systems (CS604)

Question: 20 (Marks: 1)

Attempted Questions: 25 Total Questions: 26

A parent process calling \_\_\_\_\_ system call will be suspended until any immediate child terminates.

Choices:

wait

☐

Correct Answer Solved By Hadi  
usmanraj20@gmail.com  
03228043306

fork

☐

exit

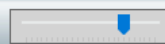
☒

exec

☐

TIME LEFT

16



Operating Systems (CS604)

Question: 21 (Marks: 2)

Attempted Questions: 25

Total Questions: 26

Let us consider a situation in which each process gets a small unit of CPU time, called *time slice* or *quantum*, which is usually 10-100 milliseconds. After this time has elapsed, the process is preempted and added to the end of the ready queue. Which scheduling algorithm is best suited for above situation?

Answer:



TIME LEFT

16



Operating Systems (CS604)

Question: 22 (Marks: 2)

Attempted Questions: 25 Total Questions: 26

Process can run either as background process or as foreground process. If there is a process which is in the suspended state and working in background, you wanted to display the status of suspended and background process in a UNIX/LINUX shell. Which command will you use?

Answer:



Moving a process into foreground: fg [%job\_id]  
where, job\_id is the job ID (not process ID) of the suspended or background process. If %job\_id is omitted, the current job is assumed.  
Moving a process into background: bg [%job\_id]  
If %job\_id is omitted the current job is assumed.

TIME LEFT

16



Operating Systems (CS604)

Question: 23 (Marks: 3)

Attempted Questions: 25 Total Questions: 26

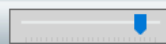
Open sources software's are continuously upgraded by different developers. How Open Source Software has made it possible for us to test various algorithms instead of pirated software's?

Answer:



TIME LEFT

16



Operating Systems (CS604)

Question: 24 (Marks: 3)

Attempted Questions: 25 Total Questions: 26

What is the function of following command in Linux/ Unix:

a) command `ls > abc.txt`

b) `cat < fileName.txt`

Answer:



Answer: (a) command `ls > abc.txt` :

Without an argument of `ls` commands it assumes your current working directory. So if we run the `ls` command right after login, it will displays names of files and directories in our home directory.

(b) `cat < fileName.txt`:

TIME LEFT

16





Operating Systems (CS604)

Question: **25** (Marks: 5)

Attempted Questions: **25** Total Questions: **26**

There are five processes given below with their run time units. Assume that all processes arrive in numerical order at time 0 then answer the questions given below:

Process ID	CPU Requirements
P <sub>1</sub>	5
P <sub>2</sub>	4
P <sub>3</sub>	2
P <sub>4</sub>	1
P <sub>5</sub>	8

Show the scheduling order for these processes under first-come-first-served, shortest-job first, and round-robin scheduling (quantum = 2).

Answer: