1.Write a command to replace “asd” “123”

a. grep
b. kde
c. all of the above.

2.Paging leads to

a.Internal fragmentation
b. External fragmentation
c All of the above

3. The purpose of long term scheduler

a.

4. Binary Semaphore can accept value

a. any numbers
b. 1 and 0
c. all of the above

5. GUI not supported by unix

a. GNOME
b. X86
c. Motif
d.

6. Unix supports

a. Multitasking
b. Multiprogramming
c Time sharing
d. All of the above

7. When a file is created in some numbers are given to it

a. Inode Number
b IInode Number
c. Node Number
d. All of the above

8. The job of DMA controller

a.
b.

9. What happens in context switching

a.

10.State the statement is true or false

a. O.S. is resource manager. True

11. Firewall

12. Trojan Horse

13. Segmentation leads to
a.Internal fragmentation
b. External fragmentation
c All of the above

14. The purpose of short term scheduler

15. Context Switch is

16 Bitmap Terminal

17.Process that are sleeping

18 **A** big file can be broker into smaller file using
A. break
B. split
C. divide
D. bifurcate
4
19 The _____ page replacement algorithm requires that the page with the smallest count be replaced.
Least frequently used (LFU)
Most frequently used (MFU)
Second chance
Lase chance

20.when rendezerous condition occurs...
1.sender sends to receiver
2.Sender has sent data.
3.

21.___ algorithm is used in real time
1.roundrobin
2.SJF

22.The editor in which u can write,save,update files
1.Vi editor

23. Unix follows the Ignore it strategy to deal with deadlocks
True
Can't say

False
System Dependent

24. The process enter the system they are put in to a _____.
Ready Queue
Job Queue.
Process Queue

26 A thread is a
light wait process
heavy wait process
c
d

27. The system-defined variable MAILCHECK contains
The duration after which the shell will check for the new mails.
The total number of mails that can be sent to the user.
The number of mails available to the user.
None

. 28.Machine language is
a. Low level langage
b. High level Language
c. Medium level Language

29. The status of the kernel
a. Process
b. Task
c. Not defined
d. Not defined

30.
If the CPU is Executing any operating system instructions,the machine is said to be in _____mode
a. System
b. User
c. I/O
d. Suspend

31. Unix .profile contains
a.
b.
c.
d.

32 . Unix is an example of _____

a. Multitasking
b. Multithreading
c. Multiprogramming

d All of the above

33.Select appropriate option for Semaphores

a. Deals with Inter process communication

b. Priority based scheduling

c. Heuristic Scheduling

d. Threading based scheduling

Q1. The shell script containing functions should be executed in the current

shell.

Correct Answer : T

Your Answer :

QuestionID : 11325 Subject Name Linux

Q2. OPTIND and OPTARG are unix defined variables.

Correct Answer : T

Your Answer :

QuestionID : 11332 Subject Name Linux

Q3. Setting made using stty in a shell script are effective only during

the execution of the script.The orignal setting are restored the moment

excution of the script is over.

Correct Answer : F

Your Answer :

QuestionID : 11344 Subject Name Linux

Q4. To list hidden as well as normal files in thr current directory the command you would use is--

1. ls - a
2. ls - b
3. ls - l
4. None of above.

Correct Answer : 1

Your Answer :

QuestionID : 11369 Subject Name Linux

Q5. what would be the output of the following program:

name=Sanjay

surname=khare

echo{name=rahul}

echo{middlename+Rahul}

echo${surname-Arora}

1. Sanjay

Blank line

Khare

2. Khare

Blank line

sanjay

3. error

4. none of the above

Correct Answer : 1

Your Answer :

QuestionID : 11376 Subject Name Linux

Q6. The minium number of links for any directory file are two.

Correct Answer : T

Your Answer :

QuestionID : 11380 Subject Name Linux

Q7. A common user can not set sticky for his file.

Correct Answer : T

Your Answer :

QuestionID : 11381 Subject Name Linux

Q8. Setting a sticky bit for a non executable file is meaningless.

Correct Answer : T

Your Answer :

QuestionID : 11394 Subject Name Linux

Q9. How would you perform the following operation on the contents of a given file.

Replace one or more spaces with a single space

1. 1,$s/[][]*/[]/g
2. 1,$s/[]*/[]/g
3. 1,$s/[][]+/[]/g
4. 1,$s/[]+/[]/g

Correct Answer : 1

Your Answer :

QuestionID : 11399 Subject Name Linux

Q10. The command cat test1 test2 >> test3 would concatenate the contents of test1

and test2 and overwrite the contents of test3 with the concatenated contents.

Correct Answer : F

Your Answer :

QuestionID : 11400 Subject Name Linux

Q11. Until = 1

```
while [$until =1]
do
 echo until can not be used as veriable name
done
```

1. No Error,unitl

can be used as veriavle name.

2. untill is reseved word it can`t be used as veriable name.

3. none

4. none

Correct Answer : 1

Your Answer :

QuestionID : 11402 Subject Name Linux

Q12. How would you perform the following operations on the contents of a given file.

Replace one or more spaces following a fullstop or a comma with two spaces

1. 1,$s/[.,][][]*/[][]/g

2. 1,$s,[.][,][][]*/[][]/g

3. 1,$s/[.,][]*/[]/g

4. 1,$s/[.,][][]+/[]/g

Correct Answer : 1

Your Answer :

QuestionID : 11404 Subject Name Linux

Q13. Command to create 5 empty files empty1,empty2,empty3,empty4,empty5

1. touch empty1,empty2,empty3,empty4,empty5

2. cat empty1,empty2,empty3,empty4,empty5

3. Both

4. None of above

Correct Answer : 1

Your Answer :

QuestionID : 11405 Subject Name Linux

Q14. "g/^[[]tab]*$/d" :command use to delete all the blank lines

Correct Answer : T

Your Answer :

QuestionID : 11409 Subject Name Linux

Q15. How would you perform the following operations on the contents of a given file.

insert a> and a space at the start of every line in the file

1. 1,$s/^/>[][]/g
2. 1,$s/>[][]/g
3. 1,$s/^/>[]/g
4. none of the above

Correct Answer : 1

Your Answer :

QuestionID : 11413 Subject Name Linux

Q16. Which of the following is a popular terminal emulation software

1. VTERM
2. VT100
3. COMIT
4. Perl

Correct Answer : 1

Your Answer :

QuestionID : 11420 Subject Name Linux

Q17. The program contained in boot block that loads kernel into memory is called

1. Disk Bootstrap program
2. Master Boot program
3. shell program
4. None of above

Correct Answer : 1

Your Answer :

QuestionID : 11425 Subject Name Linux

Q18. Purpose of .exrc file is convinient way to customize the vi environment and like all good things you shold put it to utmost use to improve your efficiency .

Correct Answer : T

Your Answer :

QuestionID : 11440 Subject Name Linux

Q19. Which command displays the line numbers by the side of each line?

1. set nu
2. set ai
3. set eb
4. set ic

Correct Answer : 1

Your Answer :

QuestionID : 11446 Subject Name Linux

Q20. while executing a shell script shell acts as a compiler

Correct Answer : F

Your Answer :

QuestionID : 11450 Subject Name Linux

Q21. vi has only help can be invocked using F1key

Correct Answer : F

Your Answer :

QuestionID : 11452 Subject Name Linux

Q22. To change our existing password we can execute the file /etc/passwd

Correct Answer : F

Your Answer :

QuestionID : 11459 Subject Name Linux

Q23. Unix can be ported to a new hardware platform with minimum changes in the unix code

Correct Answer : T

Your Answer :

QuestionID : 11461 Subject Name Linux

Q24. Any Shell script by default get executed in the current shell

Correct Answer : F

Your Answer :

QuestionID : 11469 Subject Name Linux

Q25. to search a pattern which starts with uni the command would be

1. :/ < uni
2. :/\ < uni
3. : / \ < uni >
4. none

Correct Answer : 2

Your Answer :

QuestionID : 11473 Subject Name Linux

Q26. A DOS formatted floopy can be used in UNIX and formated floppy can be used in DOS

Correct Answer : F

Your Answer :

QuestionID : 11478 Subject Name Linux

Q27. Once a jopb is submited for printing using lp command we have to take print out even if on second thoughts we realise that we should not have the printed the file

Correct Answer : F

Your Answer :

QuestionID : 11487 Subject Name Linux

Q28. What will be the output of the following command.

command:

at now + 15 minutes

clear

is -l

ctrl d

output:

NO OUTPUT.

Correct Answer : F

Your Answer :

QuestionID : 11492 Subject Name Linux

Q29. The file /bin/sysadmsh can be executed only by the system admin.

Correct Answer : T

Your Answer :

QuestionID : 11502 Subject Name Linux

Q30. A null variable a can be created using

1. a=
2. a=` `
3. a=`` ``
4. All of above

Correct Answer : 4

Your Answer :

QuestionID : 11510 Subject Name Linux

Q31. what will be the output:

command:

at now +1 week < atfile

output:

NO output.

Correct Answer : F

Your Answer :

QuestionID : 11512 Subject Name Linux

Q32. Which statements are true if the file which contains the following line is submitted to the crontab command.

10 2 3 * 0 echo ``There is no substitute for hard work``

1. The message is echoed on the 3rd of every month at 2.10 a.m
2. The message is echoed on the 3rd of every month at 2.10 p.m
3. The message is echoed on the 3rd of every month at 2.10 a.m

if it happens to be a sunday

4. None of the above.

Correct Answer : 3

Your Answer :

QuestionID : 11513 Subject Name Linux

Q33. The shell meta character $# represents

1. total number of arguments supplied to the shell script
2. total number of files in the current directory
3. total number of users who have logged in
4. total number of process running in the background

Correct Answer : 1

Your Answer :

QuestionID : 11519 Subject Name Linux

Q34. The command wc -l < aaa displays the no of words present in the

file aaa.

Correct Answer : F

Your Answer :

QuestionID : 11522 Subject Name Linux

Q35. The state of the file system is contained in

1. Boot block
2. A special block created by Boot Block
3. Super Block
4. None of the above

Correct Answer : 3

Your Answer :

QuestionID : 11527 Subject Name Linux

Q36. A floppy can be formated only by system administrator

Correct Answer : F

Your Answer :

QuestionID : 11539 Subject Name Linux

Q37. It is neccesary to unmount a file system before removing a floppy.

Correct Answer : T

Your Answer :

QuestionID : 11546 Subject Name Linux

Q38. doscp /usr/aa1/cobol/* b:/ Command for copy all the files from /usr/aa1/cobol directory to a dos formatted floppy in drive B

Correct Answer : T

Your Answer :

QuestionID : 11549 Subject Name Linux

Q39. Unix commands which accept the input from standard input device and send the output to the standard output device are called "filters".

Correct Answer : T

Your Answer :

QuestionID : 11556 Subject Name Linux

Q40. Unix commands which accept the input from standard input device and send the output to the standard output device are known as filters.

Correct Answer : T

Your Answer :

QuestionID : 11557 Subject Name Linux

Q41. Which of the following is not a filter ?

1. head
2. grep
3. tail
4. ls

Correct Answer : 4

Your Answer :

QuestionID : 11559 Subject Name Linux

Q42. k=35

echo `[$k -eq 35] ``[$k-eq 50]`

1. blank line
2. dotted line

3. error

4. none

Correct Answer : 1

Your Answer :

QuestionID : 11565 Subject Name Linux

Q43. i=3

```
if[! -z $i]
then
 echo ABC
else
 echo abc


fi
```

1. ABC

2. abc

3. error

4. none

Correct Answer : 1

Your Answer :

QuestionID : 11566 Subject Name Linux

Q44. To perform the numeric test we must use -ge instead of >=

Correct Answer : T

Your Answer :

QuestionID : 11572 Subject Name Linux

Q45. cat < file1 > file2

cat > file2 < file1

Both the commands will show the same result.

Correct Answer : T

Your Answer :

QuestionID : 11593 Subject Name Linux

Q46. if x=11 and y=6 then exit status of :

[$x -eq 5 -o $y - ne 3]

1. 0
2. 1
3. 11
4. none

Correct Answer : 1

Your Answer :

QuestionID : 11600 Subject Name Linux

Q47. A file can have links across file system.

Correct Answer : F

Your Answer :

QuestionID : 11612 Subject Name Linux

Q48. point out error

1. Echo Enter filename

2. read fname

3. if[-rwx $fname]

3. then

4. echo read write and execute permissions

5. fi

1. line 3
2. line 1
3. line 5
4. no error

Correct Answer : 1

Your Answer :

QuestionID : 11620 Subject Name Linux

Q49. The process id number of the process vhand,bdflush,sched and init are

1. 1,2,3 1nd 4
2. 2,3,0 and 1
3. 3,4,1 and 2
4. 0,1,2 and 3

Correct Answer : 2

Your Answer :

QuestionID : 11621 Subject Name Linux

Q50. The daemon process can be killed using using the kill command

Correct Answer : F

Q1. The cpu utilization is low when the system is

1. executing
2. thrasing
3. waiting
4. all of the above

Correct Answer : 2

Your Answer : 3

QuestionID : 11057 Subject Name Operating Syatems Concepts

Q2. Which of the following is non preemtive O.S.?

1. Unix
2. Windows 95
3. Windows NT
4. None

Correct Answer : 2

Your Answer : 4

QuestionID : 11058 Subject Name Operating Syatems Concepts

Q3. SJF is the best scheduling algorithm.

Correct Answer : T

Your Answer :

QuestionID : 11062 Subject Name Operating Syatems Concepts

Q4. In a system that does not support swapping

a) the compiler normally binds symbolic addresses to relocatable addresses

b) the compiler normally binds symbolic addresses to physical addresses

c) the loader binds relocatable addresses to physical addresses

d) binding of symbolic addresses to physical addresses normally takes place during execution

1. a,b,c
2. c,d
3. a,c
4. all of above

Correct Answer : 3

Your Answer :

QuestionID : 11064 Subject Name Operating Syatems Concepts

Q5. FAT stands for

1. File Allocation Table
2. File Access Table
3. File Attribute Table
4. None of the above

Correct Answer : 1

Your Answer :

QuestionID : 11070 Subject Name Operating Syatems Concepts

Q6. During the process of loading the program, a _____ modifies the actual instruction so that the effect of load address is taken into account

1. resource locator
2. loader
3. relocating loader
4. relocation register

Correct Answer : 4

Your Answer :

QuestionID : 11071 Subject Name Operating Syatems Concepts

Q7. ------ scheduler selects the process that is ready to execute to CPU.

1. long-term scheduler
2. short-term scheduler
3. medium-term scheduler
4. None of these

Correct Answer : 2

Your Answer :

QuestionID : 11073 Subject Name Operating Syatems Concepts

Q8. A thread is a light-weight process.

Correct Answer : T

Your Answer :

QuestionID : 11074 Subject Name Operating Syatems Concepts

Q9. LAN covers radius of up to 10 KM

Correct Answer : F

Your Answer :

QuestionID : 11079 Subject Name Operating Syatems Concepts

Q10. Mutex is Mutual Exclution semaphore.

Correct Answer : T

Your Answer :

QuestionID : 11081 Subject Name Operating Syatems Concepts

Q11. The transfer of process from memory to secondary storage is called

1. Process loading
2. swapping
3. segmentation
4. relocating

Correct Answer : 2

Your Answer :

QuestionID : 11083 Subject Name Operating Syatems Concepts

Q12. A process refers to 5 pages, A,B,C,D & E in the order - A; B; C; D; A; B; E; A; B; C; D; E. If the page replacement algorithm is FIFO,the number of pages which transfer with an emty internal store of 3 frames is

1. 8
2. 10
3. 9
4. 7

Correct Answer : 3

Your Answer :

QuestionID : 11087 Subject Name Operating Syatems Concepts

Q13. FCFS stands for -----

1. Fast Come First Serve.
2. First Come First Serve.
3. Both are true.
4. Both are False.

Correct Answer : 2

Your Answer :

QuestionID : 11090 Subject Name Operating Syatems Concepts

Q14. Spatial locality refers to the problem that once a location is referenced

1. it will not be referenced again.
2. it will be referenced again.

3. A nearby location will be referenced soon.

4. none of the above.

Correct Answer : 3

Your Answer :

QuestionID : 11092 Subject Name Operating Syatems Concepts

Q15. The CPU utilization is low when the system is

1. Timesharing

2. Thrashing

3. Multiprocessing

4. None of the above

Correct Answer : 2

Your Answer :

QuestionID : 11094 Subject Name Operating Syatems Concepts

Q16. SPOOLING stands for _____

1. Simultaneous Peripheral Operations OnLine

2. Spontaneous Peripheral Operations OnLine

3. Serial

Peripheral Operations OnLine

4. None of the above

Correct Answer : 1

Your Answer :

QuestionID : 11097 Subject Name Operating Syatems Concepts

Q17. Which of the following is true?

a) the linkage editor is used to edit programs which have to be later linked together

b) the linkage editor links object modules during compiling or assembling

c) the linkage editor links object modules and resolves external references between them before loading

d) the linkage editor resolves external references between the object modules during execution time

1. only c
2. a and c
3. only b
4. all of the above

Correct Answer : 1

Your Answer :

QuestionID : 11098 Subject Name Operating Syatems Concepts

Q18. A virtual memory is required for-

1. increasing the speed
2. increasibg the addressing modes
3. overcomming the size limitation of main memeory
4. overcomming the size limitation of cache memory

Correct Answer : 3

Your Answer :

QuestionID : 11099 Subject Name Operating Syatems Concepts

Q19. With a single resource deadlock occures

1. if there are more than two processes computing for that resource
2. if there are only than two processes computing for that resource
3. if there are a single process computing for that resource
4. None of the above

Correct Answer : 4

Your Answer :

QuestionID : 11101 Subject Name Operating Syatems Concepts

Q20. The following is not a form of IPC.

1. semaphore
2. pipe
3. shared memory
4. buffering

Correct Answer : 1

Your Answer :

QuestionID : 11102 Subject Name Operating Syatems Concepts

Q21. Disk request come to a disk driver for cylinders in the order 10,22,20,2,40,6 and 38, at time when the disk drive is reading from cylinder 20.

The seek time is 6 ms per cylinder. the total seek time, if the disk arm sheduling algorithm is closest cylinder next is

1. 360 ms
2. 876 ms
3. 850 ms
4. 900 ms

Correct Answer : 1

Your Answer :

QuestionID : 11103 Subject Name Operating Syatems Concepts

Q22. Fence register is used for

1. CPU protection
2. Memory protection
3. File protection
4. All of the above

Correct Answer : 2

Your Answer :

QuestionID : 11107 Subject Name Operating Syatems Concepts

Q23. _____ is a significant factor in maintaining fragmentation

within usable limits

1. External Fragmentation
2. Paging
3. Coalescing of holes
4. Both 2 and 3

Correct Answer : 4

Your Answer :

QuestionID : 11108 Subject Name Operating Syatems Concepts

Q24. Pre-emptive scheduling is the strategy of temporarily suspending a running

process

1. before the cpu time slice expires
2. to allow starving process to run
3. when it request i/o
4. none of the above

Correct Answer : 1

Your Answer :

QuestionID : 11113 Subject Name Operating Syatems Concepts

Q25. Overlay is

1. a part of an Operating System
2. a specific memory location
3. a single contiguous memory that was used in the olden days for running large programs by swapping

4. overloading the system with many user files

Correct Answer : 3

Your Answer :

QuestionID : 11114 Subject Name Operating Syatems Concepts

Q26. The problem of thrashing may be reduced by

1. Using preparing mechanism
2. Writing well structered programs
3. Both 1 and 2
4. Neither 1 nor 2

Correct Answer : 3

Your Answer :

QuestionID : 11115 Subject Name Operating Syatems Concepts

Q27.

the address sequence generated by a particular program executing in demand paging with 100 records per page with one free memory frame is recorded.what is the number of page fault;

100,200,430,499,510,530,560,120,220,240,260,320,370

1. 13
2. 7
3. 8
4. 10

Correct Answer : 4

Your Answer :

QuestionID : 11119 Subject Name Operating Syatems Concepts

Q28. Which of the following is true?

a) Overlays are used to increase the size of physical memory

b) Overlays are used to increase the logical address space

c) when overlays are used the size of project is not limited to the size of physical memory

d) Overlays are used whenever the physical address space is smaller than the logical address space

1. a and b
2. only c
3. only a
4. none of the above

Correct Answer : 2

Your Answer :

QuestionID : 11121 Subject Name Operating Syatems Concepts

Q29. which of the following is an example of SPOOLED device

1. The terminal used to enter the input data for a program being executed.
2. The secondary memory device in a virtual memory system.
3. A line printer used to print the output of a number of jobs.
4. none of the above.

Correct Answer : 3

Your Answer :

QuestionID : 11124 Subject Name Operating Syatems Concepts

Q30. Necessary condition for deadlock are

1. non preemption and circular wait
2. mutual exclusion and partial allocation
3. a and b
4. None of these

Correct Answer : 3

Your Answer :

QuestionID : 11126 Subject Name Operating Syatems Concepts

Q31. Round-Robbin understands priority?

Correct Answer : F

Your Answer :

QuestionID : 11129 Subject Name Operating Syatems Concepts

Q32. A certain moving arm disk storage with one head has following specifications:

Number of tracks/recording surface=200

Disk rotation speed=2400 rpm.

Track storage capacity=62500 bits

The avarage latency time (assume that the head can move from one track to another only by traversing the entire track)

is

1. 2.5 s
2. 2.9 s
3. 3.1 s
4. 3.6 s

Correct Answer : 1

Your Answer :

QuestionID : 11130 Subject Name Operating Syatems Concepts

Q33. Which of the following CPU scheduling algorithms will prevent the starvation algorithm?

1. Shortest job first.
2. Priority schedulling.
3. Priority schedulling with aging mechanism.

4. None of the above.

Correct Answer : 3

Your Answer :

QuestionID : 11132 Subject Name Operating Syatems Concepts

Q34. Critical region is

1. a part of operating system which is not allowed to be accessed by any process.
2. a set of instructions that access common shared resource which exclude one another in time.
3. the portion of main memory which can be accessed only by one process at a time.
4. None of the above.

Correct Answer : 2

Your Answer :

QuestionID : 11134 Subject Name Operating Syatems Concepts

Q35. The I/O subsystem consists of_____

1. Memory management component including buffering,caching and spooling
2. A general device driver interface
3. Drivers for specific hardware devices
4. All of the above

Correct Answer : 4

Your Answer :

QuestionID : 11136 Subject Name Operating Syatems Concepts

Q36. Efficient operation of computer system and Convinience for user

are the goals of operating system.

Correct Answer : T

Your Answer :

QuestionID : 11142 Subject Name Operating Syatems Concepts

Q37. The signal of the keyboard sends to the computer a special kind of message called

1. keyboard request
2. keyboard controller
3. interrupt controller
4. interrupt request

Correct Answer : 4

Your Answer :

QuestionID : 11143 Subject Name Operating Syatems Concepts

Q38. Concurrent processes are processes that

1. Do not overlap in time
2. Overlap in time
3. Are executed by a processor at the same time
4. None of above

Correct Answer : 2

Your Answer :

QuestionID : 11144 Subject Name Operating Syatems Concepts

Q39. The time of admission of job to ready queue to completion is_____

1. Turnaround time
2. Burst time
3. Response time
4. None of the above.

Correct Answer : 1

Your Answer :

QuestionID : 11145 Subject Name Operating Syatems Concepts

Q40. A file system uses the contiguous space allocation mechanism for disk allocation .For better utilization of disk space ,this file system must use

1. A garbage collection mechanism
2. A disk compaction mechanism
3. A linked-block allocation mechanism
4. An indexed-block allocation mechanism

Correct Answer : 4

Your Answer :

QuestionID : 11146 Subject Name Operating Syatems Concepts

Q41. Disk scheduling involves deciding

1. which disk should be accessed next
2. the order in which disk access request must be serviced
3. the physical location where files should be accessed in the disk
4. none of the above

Correct Answer : 2

Your Answer :

QuestionID : 11151 Subject Name Operating Syatems Concepts

Q42. Which of the following CPU scheduling algorithm will prevent starvation

problem.

1. shortest-job-first
2. priority scheduling
3. priority scheduling with aging mechanism
4. None of the above

Correct Answer : 3

Your Answer :

QuestionID : 11152 Subject Name Operating Syatems Concepts

Q43. Kernel is

1. considered as critical part of operating system.
2. software which monitors operating system.
3. set of primitive functions upon which rest of operating system functions are built up.
4. none of the above.

Correct Answer : 3

Your Answer :

QuestionID : 11155 Subject Name Operating Syatems Concepts

Q44. The page replacement policy that some times leads to more page faults when size of memory is increased is

1. FIFO
2. LRU
3. No such policy exists
4. None of above

Correct Answer : 1

Your Answer :

QuestionID : 11156 Subject Name Operating Syatems Concepts

Q45. Dirty bit for a page in page table

1. helps avoids unnecessary writes on paging
2. helps maintain LRU information
3. allows only read on a page
4. none

Correct Answer : 1

Your Answer :

QuestionID : 11157 Subject Name Operating Syatems Concepts

Q46. At a perticular time of computation the value of counting semaphore

is 7. Then 20 `p` operation abd x `v` operation were completed on this semaphore.

If the final value of the semaphore is 5, x will be...

1. 15
2. 22
3. 18
4. 13

Correct Answer : 3

Your Answer :

QuestionID : 11161 Subject Name Operating Syatems Concepts

Q47. The main purpose(s)of an operating system is/are_____

1. Convenience for the user.
2. Efficient operation of the Computer system.
3. Optimal use of Computer resources.
4. All of the above

Correct Answer : 4

Your Answer :

QuestionID : 11165 Subject Name Operating Syatems Concepts

Q48. Bankers algorithm is an example of deadlock avoidance.

Correct Answer : T

Your Answer :

QuestionID : 11166 Subject Name Operating Syatems Concepts

Q49. cipher text is decrypted text.

Correct Answer : T

Your Answer :

QuestionID : 11170 Subject Name Operating Syatems Concepts

Q50. The process of loading the os into the main memory is done

by the bootstrap loader.

Correct Answer : T

Your Answer :

QuestionID : 11172 Subject Name Operating Syatems Concepts

Q51. Andrew and Sprite are examples of Distributed operating system.

Correct Answer : T

Your Answer :

QuestionID : 11175 Subject Name Operating Syatems Concepts

Q52. CPU performance is based on:-

1. ALU width.
2. Clock speed .
3. Number of instructions executed per second.
4. both a and b.

Correct Answer : 3

Your Answer :

QuestionID : 11176 Subject Name Operating Syatems Concepts

Q53. The protected mode is necessary for

1. Multi-tasking system
2. Multi-user system
3. Both 1 and 2
4. 16 bit programming

Correct Answer : 3

Your Answer :

QuestionID : 11177 Subject Name Operating Syatems Concepts

Q54. DMA stands for Dynamic memory allocation.

Correct Answer : F

Your Answer :

QuestionID : 11184 Subject Name Operating Syatems Concepts

Q55. Intime sharing operating system ,

when time slot given to a process is completed ,

the process goes from RUNNING state to the

1. BLOCKED state
2. Ready State
3. SUSPENDED state
4. TERMINATED state

Correct Answer : 2

Your Answer :

QuestionID : 11186 Subject Name Operating Syatems Concepts

Q56. The size of virtual memory depends on the size of the

1. data bus
2. main memory
3. address bus
4. none

Correct Answer : 3

Your Answer :

QuestionID : 11187 Subject Name Operating Syatems Concepts

Q57. `Aging` is

1. keeping track of cache contents
2. keeping track of what pages are currently residing in the memory
3. keeping track how many times the given page is refrenced
4. increasing the priority of jobs to ensure termination in a finite time

Correct Answer : 4

Your Answer :

QuestionID : 11189 Subject Name Operating Syatems Concepts

Q58. In paged memory system if the page size is increased then internal fragmentation generally.

1. becomes less
2. becomes more
3. remains constant
4. none of the above

Correct Answer : 2

Your Answer :

QuestionID : 11196 Subject Name Operating Syatems Concepts

Q59. In a multi-user OS,20 requests are made to a particular resource per hour,on an average.The probability that no requests are made in 45 minutes is

1. (e)-15
2. (e)-5
3. 1-(e)-5
4. 1-(e)-10

Correct Answer : 4

Your Answer :

QuestionID : 11199 Subject Name Operating Syatems Concepts

Q60. Which of the following is not a part of a process control block(PCB).

1. Values of a CPU registers
2. CPU Scheduling information
3. Memory limits of the process
4. List of files accessible to the proces.

Correct Answer : 4

Your Answer :

QuestionID : 11200 Subject Name Operating Syatems Concepts

Q61. RAID level 3 is also known as

1. memory-style error-correcting code.
2. Block-interleaved parity organization.
3. Bit-interleaved parity organization.
4. All of the above

Correct Answer : 2

Your Answer :

QuestionID : 11204 Subject Name Operating Syatems Concepts

Q62. _____ sheduler select the process that is ready to execute to CPU.

1. Long term
2. Short term
3. medium term
4. none of above

Correct Answer : 2

Your Answer :

QuestionID : 11208 Subject Name Operating Syatems Concepts

Q63. In multi programming environment

1. A processor executes more than one process at a time.

2. The program are developed by more than one person.
3. More than one process resides in memory
4. A single user can executes many programs at the same time.

Correct Answer : 3

Your Answer :

QuestionID : 11209 Subject Name Operating Syatems Concepts

Q64. FIFO and LRU are the popular page replacement algorithms.

Correct Answer : T

Your Answer :

QuestionID : 11211 Subject Name Operating Syatems Concepts

Q65. In a page segemented scheme of memory management, the segement table itself must have a page table because...

1. the segement tabble is often too large to fit in one page
2. each segment is seperated over a number of pages
3. segement tables point to page tables and not to the physical location of the segement
4. the processor`s description base register point to a page table

Correct Answer : 2

Your Answer :

QuestionID : 11216 Subject Name Operating Syatems Concepts

Q66. Sector Interleaving in disks is doen by

1. disk manufacturer
2. disk controller cord
3. the operating system
4. none of above

Correct Answer : 3

Your Answer :

QuestionID : 11222 Subject Name Operating Syatems Concepts

Q67. Which of the following scheduling policy is well

suited for a time-shared operating system?

1. Shortest job first
2. Round robin
3. First-come-first-serve
4. Elevator

Correct Answer : 2

Your Answer :

QuestionID : 11224 Subject Name Operating Syatems Concepts

Q68. Which of the following are RTOS ?

1. An on-line railway reservation system
2. A process control system.
3. Aircraft control system.
4. Payroll processing system.

Correct Answer : 3

Your Answer :

QuestionID : 11235 Subject Name Operating Syatems Concepts

Q69. The Motivations Behind Networks are

1)Resource Sharing

2)Computation Speedup

3)Reliability

4)Communication

1. 1,2

2. 1,3
3. only 3
4. All the Above

Correct Answer : 4

Your Answer :

QuestionID : 11236 Subject Name Operating Syatems Concepts

Q70. Which of the following is a non-preemtive O.S?

1. Unix
2. Windows95
3. Wnidows NT
4. None of the above

Correct Answer : 4

Your Answer :

QuestionID : 11237 Subject Name Operating Syatems Concepts

Q71. The main purpose of an Operatimg system is/are ...

1. convenience for the user
2. efficient operation of the computer system.
3. optimal use of the compuetr resources.
4. All of the above.

Correct Answer : 4

Your Answer :

QuestionID : 11242 Subject Name Operating Syatems Concepts

Q72. In a typical unix set up the host machinbe is attached to the termnals through

1. i/o card
2. Disk controller card

3. Sound blaster card

4. 4/8 - port contrller card

Correct Answer : 4

Your Answer :

QuestionID : 11244 Subject Name Operating Syatems Concepts

Q73. Round Robin is an example of timesharing scheduling policy.

Correct Answer : T

Your Answer :

QuestionID : 11245 Subject Name Operating Syatems Concepts

Q74. The segmented memory is provided mainly

1. for higher speeds

2. to maintain compatibity with old processors

3. for ease of application programming

4. simple hardware

Correct Answer : 1

Your Answer :

QuestionID : 11247 Subject Name Operating Syatems Concepts

Q75. Unix is an example of multiuser system.

Correct Answer : T

Your Answer :

QuestionID : 11250 Subject Name Operating Syatems Concepts

Q76. single system image is obtained in case of Distributed system

Correct Answer : T

Your Answer :

QuestionID : 11252 Subject Name Operating Syatems Concepts

Q77. Device Controller is a Hardware

Correct Answer : F

Your Answer :

QuestionID : 11255 Subject Name Operating Syatems Concepts

Q78. Consider a system having m resources of same type.The resources are shared by

3 processes A,B ,C which have peak time demands of 3,4,6 respctively.The minimum

value of m that ensures that deadlock will never occur is

1. 11
2. 12
3. 13
4. 14

Correct Answer : 1

Your Answer :

QuestionID : 11258 Subject Name Operating Syatems Concepts

Q79. Consider a computer with 8 Mbytes of the main memory & 128 K cache.The cache block size is 4K .It

uses a direct mapping scheme for the cache management. how many different main memory blocks can map on to a given physical cache block

1. 2048
2. 256
3. 64
4. none

Correct Answer : 3

Your Answer :

QuestionID : 11260 Subject Name Operating Syatems Concepts

Q80. Which of the following statement is not true

1. A directory is a special type of file.
2. A directory is used to store file attribute.
3. A directory is used to store file data.
4. A directory is used to store file access information.

Correct Answer : 3

Your Answer :

QuestionID : 11262 Subject Name Operating Syatems Concepts

Q81. Which schedular selects the process that is ready toexecute to CPU.

1. long term schedular
2. mid-term schedular
3. short-term schedular
4. any schedular does not do that task

Correct Answer : 3

Your Answer :

QuestionID : 11270 Subject Name Operating Syatems Concepts

Q82. Within `` piping and redirection metacharacters cannot be used.

Correct Answer : F

Your Answer :

QuestionID : 11272 Subject Name Operating Syatems Concepts

Q83. which of the following is false

1. deadlock state is unsafe
2. unsafe state may lead to deadlock situation
3. unsafe state must lead to deadlock situation
4. deadlock system is subset of unsafe system

Correct Answer : 3

Your Answer :

QuestionID : 11274 Subject Name Operating Syatems Concepts

Q84. If filenames are supplied as arguments to a script rm"$@" would remove all files supplied as arguments.

Correct Answer : T

Your Answer :

QuestionID : 11275 Subject Name Operating Syatems Concepts

Q85. a demand paging system with page table held in registers takes 5 milli sec to service a page fault, if an empty page is available,

or if page to be replaced is not dirty. It takes 50 milli sec if the replaced page is dirty. memory access time is 1 micro sec,

assume we want an effective access time of 2 micro sec and that page to be replaced is dirty 60% of time, what is the approximate

maximum acceptible page fault rate to meet this access time requirement

1. 0.1%
2. 1.0%
3. 2.5%
4. 0.01%

Correct Answer : 4

Your Answer :

QuestionID : 11276 Subject Name Operating Syatems Concepts

Q86. Which of the following statements is not true?

1. a directory is special type of file
2. a directory is used to store file attributes
3. a directory is used to store data
4. a directory is used to store file access information

Correct Answer : 3

Your Answer :

QuestionID : 11280 Subject Name Operating Syatems Concepts

Q87. $? gives the PID of last background process, where as $! gives the exit status of the last command executed.

Correct Answer : F

Your Answer :

QuestionID : 11286 Subject Name Operating Syatems Concepts

Q88. When $,*,\,? or `` are enclosed within a pair of double qoutes they continue to enjoy their same normal meaning.

Correct Answer : F

Your Answer :

QuestionID : 11287 Subject Name Operating Syatems Concepts

Q89. Th e correct matching of the following pairs :

A. disk sccheduling 1.round robin

B. batch processing 2.scan

C. time sharing 3. LIFO

D. interrupt processing 4.FIFO

1. A-3,B-4,C-2,D-1
2. A-4,B-3,C-2,D-1
3. A-2,B-4,C-1,D-3
4. A-2,B-1,C-4,D-3

Correct Answer : 3

Your Answer :

QuestionID : 11290 Subject Name Operating Syatems Concepts

Q90. Mutex is an acronym for Mutual Exclusion.

Correct Answer : T

Your Answer :

QuestionID : 11292 Subject Name Operating Syatems Concepts

Q91. Suppose the following files are present in the current directory:

ashish arctan dac.doc dim.dwg document

fag fibonacci finder fog folder

sam si.c tarun zenith zombie

Which files would be listed by the following command?

Is [!fd]

1. None
2. zenith zombie
3. [!fd] not found
4. fag fibonacci finder fog folder

Correct Answer : 3

Your Answer :

QuestionID : 11293 Subject Name Operating Syatems Concepts

Q92. Suppose the following files are present in the current directory:

ashish arctan dac.doc dim.dwg document

fag fibonacci finder fog folder

sam si.c tarun zenith zombie

Which files would be listed by the following command?

Is[!fd]*

1. Displays all the files other than those whose names begin with `f`or `d`
2. Displays all the files other than those whose names begin with `f`or `d`or `.c`
3. Display all files
4. None

Correct Answer : 1

Your Answer :

QuestionID : 11297 Subject Name Operating Syatems Concepts

Q93. the fol.is a part of FAT

1. sector info
2. disk type
3. date info
4. none

Correct Answer : 1

Your Answer :

QuestionID : 11303 Subject Name Operating Syatems Concepts

Q94. b=

[-n $b]

echo $?

[-z $b]

echo $?

1. Will run fine
2. test : argument expected
3. error
4. none

Correct Answer : 2

Your Answer :

QuestionID : 11304 Subject Name Operating Syatems Concepts

Q95. x=3 y=5 z=10

if [\($x-eq 3\) -a \($y - eq 5 - 0 $z - eq 10\)]

```
then
 echo $x
else
 echo $y


fi
```

1. 2
2. 3
3. none
4. 4

Correct Answer : 1

Your Answer :

QuestionID : 11305 Subject Name Operating Syatems Concepts

Q96. point out error

```
a=12 b=12.52
if[a=b] then echo "\n a and b are equal"
fi
```

1. [a=b]
2. fi
3. both
4. none

Correct Answer : 1

Your Answer :

QuestionID : 11308 Subject Name Operating Syatems Concepts

Q97. A space allocated in units of fixed size is called block

Correct Answer : T

Your Answer :

QuestionID : 11309 Subject Name Operating Syatems Concepts

Q98. Single system image is obtained in case of ----

1. desktop
2. Distributed
3. network
4. none

Correct Answer : 2

Your Answer :

QuestionID : 11311 Subject Name Operating Syatems Concepts

Q99. 80826 the addressing schema is _____ addressing

1. 8 bit
2. 16 bit
3. 24 bit
4. 28 bit

Correct Answer : 3

Your Answer :

QuestionID : 11629 Subject Name Operating Syatems Concepts

Q100. Banking Algorithm is example of

1. Deadlock avoidance
2. deadlock detection
3. both option 1 and option 2
4. deadlock recovery

Correct Answer : 1

Q1. The cpu utilization is low when the system is

1. executing
2. thrasing
3. waiting
4. all of the above

Correct Answer : 2

Your Answer : 0

QuestionID : 11057 Subject Name Operating Syatems Concepts

Q2. Which of the following is non preemtive O.S.?

1. Unix
2. Windows 95
3. Windows NT
4. None

Correct Answer : 2

Your Answer :

QuestionID : 11064 Subject Name Operating Syatems Concepts

Q3. FAT stands for

1. File Allocation Table
2. File Access Table
3. File Attribute Table
4. None of the above

Correct Answer : 1

Your Answer :

QuestionID : 11065 Subject Name Operating Syatems Concepts

Q4. A programm can execute more than once simultaneously is called

1. re-executable
2. re-entrant
3. multiprogramming
4. none of the above

Correct Answer : 2

Your Answer :

QuestionID : 11067 Subject Name Operating Syatems Concepts

Q5. A virus is a type of worm

Correct Answer : F

Your Answer :

QuestionID : 11069 Subject Name Operating Syatems Concepts

Q6. To obtain better memory utilization , dynamic loading is used. With dynamic loading , routine is not loaded until it is called for. For implementing dynamic loading

1. special support from hardware is essential
2. special support from OS is essential
3. special support from both hardware and OS is essential
4. user programss can implement dynamic loading without any special support form the OS or the hardware

Correct Answer : 4

Your Answer :

QuestionID : 11070 Subject Name Operating Syatems Concepts

Q7. During the process of loading the program, a _____ modifies the actual

instruction so that the effect of load address is taken into account

1. resource locator
2. loader
3. relocating loader

4. relocation register

Correct Answer : 4

Your Answer :

QuestionID : 11071 Subject Name Operating Syatems Concepts

Q8. ------ scheduler selects the process that is ready to execute to CPU.

1. long-term scheduler
2. short-term scheduler
3. medium-term scheduler
4. None of these

Correct Answer : 2

Your Answer :

QuestionID : 11073 Subject Name Operating Syatems Concepts

Q9. A thread is a light-weight process.

Correct Answer : T

Your Answer :

QuestionID : 11074 Subject Name Operating Syatems Concepts

Q10. LAN covers radius of up to 10 KM

Correct Answer : F

Your Answer :

QuestionID : 11081 Subject Name Operating Syatems Concepts

Q11. The transfer of process from memory to secondary storage is called

1. Process loading
2. swapping
3. segmentation
4. relocating

Correct Answer : 2

Your Answer :

QuestionID : 11082 Subject Name Operating Syatems Concepts

Q12. paging allows protection

Correct Answer : F

Your Answer :

QuestionID : 11086 Subject Name Operating Syatems Concepts

Q13. Page Fault occurs when

1. the page is corrupted by application software
2. the page is in main memory
3. the page is not in main memory
4. one tries to divide a number by 0

Correct Answer : 3

Your Answer :

QuestionID : 11087 Subject Name Operating Syatems Concepts

Q14. FCFS stands for -----

1. Fast Come First Serve.
2. First Come First Serve.
3. Both are true.
4. Both are False.

Correct Answer : 2

Your Answer :

QuestionID : 11091 Subject Name Operating Syatems Concepts

Q15. Mutex is Mutual Exclusion semaphore.

Correct Answer : T

Your Answer :

QuestionID : 11094 Subject Name Operating Syatems Concepts

Q16. SPOOLING stands for _____

1. Simultaneous Peripheral Operations OnLine
2. Spontaneous Peripheral Operations OnLine
3. Serial

Peripheral Operations OnLine

4. None of the above

Correct Answer : 1

Your Answer :

QuestionID : 11095 Subject Name Operating Syatems Concepts

Q17. Page fault rate is a relation between number of page faults & number of the page frames allocated to the process.

Correct Answer : T

Your Answer :

QuestionID : 11096 Subject Name Operating Syatems Concepts

Q18. Turnaround refers to delay between job submission and job completion

Correct Answer : T

Your Answer :

QuestionID : 11097 Subject Name Operating Syatems Concepts

Q19. Which of the following is true?

a) the linkage editor is used to edit programs which have to be later linked together

b) the linkage editor links object modules during compiling or assembling

c) the linkage editor links object modules and resolves external references between them before loading

d) the linkage editor resolves external references between the object modules during execution time

1. only c
2. a and c
3. only b
4. all of the above

Correct Answer : 1

Your Answer :

QuestionID : 11099 Subject Name Operating Syatems Concepts

Q20. With a single resource deadlock occures

1. if there are more than two processes computing for that resource
2. if there are only than two processes computing for that resource
3. if there are a single process computing for that resource
4. None of the above

Correct Answer : 4

Your Answer :

QuestionID : 11105 Subject Name Operating Syatems Concepts

Q21. It is possible to have a deadlock involving only a single process

Correct Answer : F

Your Answer :

QuestionID : 11107 Subject Name Operating Syatems Concepts

Q22. _____ is a significant factor in maintaining fragmentation

within usable limits

1. External Fragmentation
2. Paging
3. Coalescing of holes

4. Both 2 and 3

Correct Answer : 4

Your Answer :

QuestionID : 11108 Subject Name Operating Syatems Concepts

Q23. Pre-emptive scheduling is the strategy of temporarily suspending a running process

1. before the cpu time slice expires
2. to allow starving process to run
3. when it request i/o
4. none of the above

Correct Answer : 1

Your Answer :

QuestionID : 11110 Subject Name Operating Syatems Concepts

Q24. The signal the keyboard sends to the computer is special kind of message called_____

1. Keyboard request
2. Keyboard controller
3. Interrupt Controller
4. Interrupt Request

Correct Answer : 4

Your Answer :

QuestionID : 11112 Subject Name Operating Syatems Concepts

Q25. When fork() is given-

1. it creates a child process
2. allocates slot in process table

3. returns 0 to parent & ID to child

4. All of the above.

Correct Answer : 1

Your Answer :

QuestionID : 11114 Subject Name Operating Syatems Concepts

Q26. The problem of thrashing may be reduced by

1. Using preparing mechanism

2. Writing well structered programs

3. Both 1 and 2

4. Neither 1 nor 2

Correct Answer : 3

Your Answer :

QuestionID : 11115 Subject Name Operating Syatems Concepts

Q27.

the address sequence generated by a particular program executing in demand paging with 100 records per page with one free memory frame is recorded.what is the number of page fault;

100,200,430,499,510,530,560,120,220,240,260,320,370

1. 13

2. 7

3. 8

4. 10

Correct Answer : 4

Your Answer :

QuestionID : 11117 Subject Name Operating Syatems Concepts

Q28. Which of the following service is not supported by Operating system ?

1. Protection
2. Accounting
3. Compilation
4. I/O operation

Correct Answer : 3

Your Answer :

QuestionID : 11118 Subject Name Operating Syatems Concepts

Q29. Protection of memory is ensured using ------- and -------.

1. paging,virtual memory
2. base register ,limit register
3. IP egister,hardware register
4. scheduling,synchronization

Correct Answer : 2

Your Answer :

QuestionID : 11124 Subject Name Operating Syatems Concepts

Q30. Necessary condition for deadlock are

1. non preemption and circular wait
2. mutual exclusion and partial allocation
3. a and b
4. None of these

Correct Answer : 3

Your Answer :

QuestionID : 11136 Subject Name Operating Syatems Concepts

Q31. Efficient operation of computer system and Convinience for user

are the goals of operating system.

Correct Answer : T

Your Answer :

QuestionID : 11137 Subject Name Operating Syatems Concepts

Q32. When fork() is given-

1. it creates a child process.
2. Allocates slot in process table.
3. returns 0 to parent and ID to child.
4. all of the above.

Correct Answer : 4

Your Answer :

QuestionID : 11140 Subject Name Operating Syatems Concepts

Q33. The first-fit,best-fit,worst-fit algorithm can be used for

1. Contiguous memory allocation
2. Linked memory allocation
3. Indexed memory allocation
4. All of the above

Correct Answer : 1

Your Answer :

QuestionID : 11142 Subject Name Operating Syatems Concepts

Q34. The signal of the keyboard sends to the computer a special kind of message called

1. keyboard request
2. keyboard controller
3. interrupt controller

4. interrupt request

Correct Answer : 4

Your Answer :

QuestionID : 11143 Subject Name Operating Syatems Concepts

Q35. Concurrent processes are processes that

1. Do not overlap in time
2. Overlap in time
3. Are executed by a processor at the same time
4. None of above

Correct Answer : 2

Your Answer :

QuestionID : 11144 Subject Name Operating Syatems Concepts

Q36. The time of admission of job to ready queue to completion is_____

1. Turnaround time
2. Burst time
3. Response time
4. None of the above.

Correct Answer : 1

Your Answer :

QuestionID : 11145 Subject Name Operating Syatems Concepts

Q37. A file system uses the contiguous space allocation mechanism for disk allocation .For better utilization of disk space ,this file system must use

1. A garbage collection mechanism
2. A disk compaction mechanism
3. A linked-block allocation mechanism

4. An indexed-block allocation mechanism

Correct Answer : 4

Your Answer :

QuestionID : 11146 Subject Name Operating Syatems Concepts

Q38. Disk scheduling involves deciding

1. which disk should be accessed next
2. the order in which disk access request must be serviced
3. the physical location where files should be accessed in the disk
4. none of the above

Correct Answer : 2

Your Answer :

QuestionID : 11148 Subject Name Operating Syatems Concepts

Q39. Which of the following is the most suitable scheduling scheme in real time operating system.

1. round robin
2. first come first served
3. pre-emtive scheduling
4. random scheduling

Correct Answer : 3

Your Answer :

QuestionID : 11149 Subject Name Operating Syatems Concepts

Q40. The fastest strogage element is?

1. CDRAM
2. DRAM
3. EDO-DRAM

4. SDRAM

Correct Answer : 2

Your Answer :

QuestionID : 11150 Subject Name Operating Syatems Concepts

Q41. If the C.P.U. scheduling Policy is priority scheduing without the pre-emption the average waiting time will be_____

1. 12.8 ms
2. 11.8 ms
3. 10.8 ms
4. none of the above

Correct Answer : 3

Your Answer :

QuestionID : 11151 Subject Name Operating Syatems Concepts

Q42. Which of the following CPU scheduling algorithm will prevent starvation problem.

1. shortest-job-first
2. priority scheduling
3. priority scheduling with aging mechanism
4. None of the above

Correct Answer : 3

Your Answer :

QuestionID : 11154 Subject Name Operating Syatems Concepts

Q43. A _____ is an intermediate main memory storage area holding the data in transit between user`s work area and the device

1. buffer

2. cache
3. back up
4. page

Correct Answer : 1

Your Answer :

QuestionID : 11155 Subject Name Operating Syatems Concepts

Q44. The page replacement policy that some times leads to more page faults when size of memory is increased is

1. FIFO
2. LRU
3. No such policy exists
4. None of above

Correct Answer : 1

Your Answer :

QuestionID : 11161 Subject Name Operating Syatems Concepts

Q45. The main purpose(s)of an operating system is/are_____

1. Convenience for the user.
2. Efficient operation of the Computer system.
3. Optimal use of Computer resources.
4. All of the above

Correct Answer : 4

Your Answer :

QuestionID : 11163 Subject Name Operating Syatems Concepts

Q46. Determine the number of page faults when reference to pages occur in the

order -1,2,4,5,2,1,2,4.Assume that the main memory can accommodate 3

pages and the main memory already has the pages 1 and 2,with page 1

having been brought earlier than page 2(Assume LRU algorithm is used

1. 3
2. 5
3. 4
4. none of the above

Correct Answer : 3

Your Answer :

QuestionID : 11169 Subject Name Operating Syatems Concepts

Q47. _____is an example of sharable resource and _____is an example of nonsharable resource

1. memory,I/O devices
2. I/O devices,memory
3. memory,CPU-Clock
4. CPU-Clock,memory

Correct Answer : 1

Your Answer :

QuestionID : 11173 Subject Name Operating Syatems Concepts

Q48. Which of the following statement is true for a deadlock state

1. The system cannot run any process
2. The system can run process barring those involved in the deadlock
3. A running process cannot request any new resource
4. All processes in ready queue enter the wait

Correct Answer : 4

Your Answer :

QuestionID : 11175 Subject Name Operating Syatems Concepts

Q49. CPU performance is based on:-

1. ALU width.
2. Clock speed .
3. Number of instructions executed per second.
4. both a and b.

Correct Answer : 3

Your Answer :

QuestionID : 11179 Subject Name Operating Syatems Concepts

Q50. Thrashing is when more time is spent in paging

than in actually running program.

Correct Answer : T

Your Answer :

QuestionID : 11181 Subject Name Operating Syatems Concepts

Q51. Dijkstra`s banking algorithm in an o.s. solves the problem of

1. deadlock avoidance
2. deadlock detection
3. mutual exclusion
4. context switching

Correct Answer : 1

Your Answer :

QuestionID : 11183 Subject Name Operating Syatems Concepts

Q52. Cascading Termination refers to termination of all child processes

before parent terminates

1. normally

2. abnormally
3. normally and abnormally
4. none of above

Correct Answer : 4

Your Answer :

QuestionID : 11187 Subject Name Operating Syatems Concepts

Q53. `Aging` is

1. keeping track of cache contents
2. keeping track of what pages are currently residing in the memory
3. keeping track how many times the given page is refrenced
4. increasing the priority of jobs to ensure termination in a finite time

Correct Answer : 4

Your Answer :

QuestionID : 11192 Subject Name Operating Syatems Concepts

Q54. Premptive scheduling is the forceful deallocation of a resource.

Correct Answer : T

Your Answer :

QuestionID : 11193 Subject Name Operating Syatems Concepts

Q55. A_____ operating system is an operating syatem which

requires a timely response from a computer system

1. Batch os
2. Workstation
3. a and b
4. None of the above

Correct Answer : 4

Your Answer :

QuestionID : 11195 Subject Name Operating Syatems Concepts

Q56. Suppose the architecture of a computer system

is layered into the following four layers:-

1. Operating System software.
2. users application software.
3. hardware and programming environment software.
4. all of the above.

Correct Answer : 4

Your Answer :

QuestionID : 11196 Subject Name Operating Syatems Concepts

Q57. In a multi-user OS,20 requests are made to a particular resource per hour,on an average.The probability that no requests are made in 45 minutes is

1. (e)-15
2. (e)-5
3. 1-(e)-5
4. 1-(e)-10

Correct Answer : 4

Your Answer :

QuestionID : 11199 Subject Name Operating Syatems Concepts

Q58. Which of the following is not a part of a process control block(PCB).

1. Values of a CPU registers
2. CPU Scheduling information
3. Memory limits of the process
4. List of files accessible to the proces.

Correct Answer : 4

Your Answer :

QuestionID : 11200 Subject Name Operating Syatems Concepts

Q59. RAID level 3 is also known as

1. memory-style error-correcting code.
2. Block-interleaved parity organization.
3. Bit-interleaved parity organization.
4. All of the above

Correct Answer : 2

Your Answer :

QuestionID : 11201 Subject Name Operating Syatems Concepts

Q60. Following is not a IPC

1. semaphore
2. pipe
3. shared memory
4. Buffering

Correct Answer : 1

Your Answer :

QuestionID : 11206 Subject Name Operating Syatems Concepts

Q61. For implementing a multiprogramming Operating System _____

1. special support from processor is required
2. special support from processor is not essential
3. cache memory must be available
4. more than one processor must be available

Correct Answer : 2

Your Answer :

QuestionID : 11207 Subject Name Operating Syatems Concepts

Q62. A process is Thrashing if it spends more time on execution than paging

1. True
2. False
3. None of the above.
4. Partially True

Correct Answer : 2

Your Answer :

QuestionID : 11208 Subject Name Operating Syatems Concepts

Q63. In multi programming environment

1. A processor executes more than one process at a time.
2. The program are developed by more than one person.
3. More than one process resides in memory
4. A single user can executes many programs at the same time.

Correct Answer : 3

Your Answer :

QuestionID : 11211 Subject Name Operating Syatems Concepts

Q64. In a page segemented scheme of memory management, the segement table

itself must have a page table because...

1. the segement tabble is often too large to fit in one page
2. each segment is seperated over a number of pages
3. segement tables point to page tables and not to the physical location of the segement
4. the processor`s description base register point to a page table

Correct Answer : 2

Your Answer :

QuestionID : 11212 Subject Name Operating Syatems Concepts

Q65. UNIX uses _____ scheduling policy

1. preemptive
2. non-preemptive
3. UNIX never folloe any sceduling policy
4. NOne of the above

Correct Answer : 1

Your Answer :

QuestionID : 11215 Subject Name Operating Syatems Concepts

Q66. A process refers to 5 pages A,B,C,D,E in order - A;B;C;D;A;B;E;A;B;C;D;E.

If the page replacement algorithm is FIFO,the number of page transfer with

an empty internal store of 4 frames is greater than for 3 frames.

Correct Answer : T

Your Answer :

QuestionID : 11222 Subject Name Operating Syatems Concepts

Q67. Which of the following scheduling policy is well

suited for a time-shared operating system?

1. Shortest job first
2. Round robin
3. First-come-first-serve
4. Elevator

Correct Answer : 2

Your Answer :

QuestionID : 11225 Subject Name Operating Syatems Concepts

Q68. Circuit switching has two variants-

connection oriented and connectionless

Correct Answer : F

Your Answer :

QuestionID : 11229 Subject Name Operating Syatems Concepts

Q69. The Scheduling policy in case of Batch processing is

1. Long Term Scheduling
2. Short Term Scheduling
3. Both 1 & 2
4. None of above

Correct Answer : 3

Your Answer :

QuestionID : 11230 Subject Name Operating Syatems Concepts

Q70. A virtual memory is required for

1. Increasing the speed
2. Increasing the addressing modes
3. Overcoming size limitation of main memory
4. Overcoming size limitation of cache memory

Correct Answer : 3

Your Answer :

QuestionID : 11231 Subject Name Operating Syatems Concepts

Q71. Turnaround Time refers to delay between job submission and job completion.

Correct Answer : T

Your Answer :

QuestionID : 11235 Subject Name Operating Syatems Concepts

Q72. The Motivations Behind Networks are

1)Resource Sharing

2)Computation Speedup

3)Reliability

4)Communication

1. 1,2
2. 1,3
3. only 3
4. All the Above

Correct Answer : 4

Your Answer :

QuestionID : 11238 Subject Name Operating Syatems Concepts

Q73. A file is anything held on secondary storage

Correct Answer : T

Your Answer :

QuestionID : 11241 Subject Name Operating Syatems Concepts

Q74. Which of the following is true about deadlock state?

1. The system cannot run any process
2. The system can run process barring those invloved in the deadlock
3. A running process cannot request any new resource
4. All process in the ready queue enter the wait queue

Correct Answer : 2

Your Answer :

QuestionID : 11242 Subject Name Operating Syatems Concepts

Q75. In a typical unix set up the host machinbe is attached to the termnals through

1. i/o card
2. Disk controller card
3. Sound blaster card
4. 4/8 - port contrller card

Correct Answer : 4

Your Answer :

QuestionID : 11250 Subject Name Operating Syatems Concepts

Q76. single system image is obtained in case of Distributed system

Correct Answer : T

Your Answer :

QuestionID : 11252 Subject Name Operating Syatems Concepts

Q77. Device Controller is a Hardware

Correct Answer : F

Your Answer :

QuestionID : 11253 Subject Name Operating Syatems Concepts

Q78. Device files in UNIX are

1. Device drivers
2. Special Files
3. Pipes
4. Unstructured files

Correct Answer : 2

Your Answer :

QuestionID : 11257 Subject Name Operating Syatems Concepts

Q79. A system has 3 processes sharing 4 resources.If each process needs

a maximun of 2 units,deadlock ----------

1. can never occur
2. may occur
3. has to occur
4. none of the above

Correct Answer : 1

Your Answer :

QuestionID : 11258 Subject Name Operating Syatems Concepts

Q80. Consider a computer with 8 Mbytes of the main memory & 128 K cache.The cache block size is 4K .It

uses a direct mapping scheme for the cache management. how many different main memory blocks can map on to a given physical cache block

1. 2048
2. 256
3. 64
4. none

Correct Answer : 3

Your Answer :

QuestionID : 11260 Subject Name Operating Syatems Concepts

Q81. Which of the following statement is not true

1. A directory is a special type of file.
2. A directory is used to store file attribute.
3. A directory is used to store file data.
4. A directory is used to store file access information.

Correct Answer : 3

Your Answer :

QuestionID : 11265 Subject Name Operating Syatems Concepts

Q82. Some computer systems support dual mode operation the user mode and the supervisor mode or monitor mode. These refer to the modes

1. by which user programs handle their data
2. By which OS executes user programs
3. In which the processor and the associated hardware operate
4. Of memory access

Correct Answer : 3

Your Answer :

QuestionID : 11270 Subject Name Operating Syatems Concepts

Q83. Within `` piping and redirection metacharacters cannot be used.

Correct Answer : F

Your Answer :

QuestionID : 11271 Subject Name Operating Syatems Concepts

Q84. Unix is the example of the Distributed operating system

Correct Answer : T

Your Answer :

QuestionID : 11273 Subject Name Operating Syatems Concepts

Q85. In which of the following directory systems,is it possible to have multiple complete paths for a file,starting from the root directory ?

1. Single level directory
2. Two level directory
3. Tree structured directory
4. Acyclic graph directory

Correct Answer : 4

Your Answer :

QuestionID : 11276 Subject Name Operating Syatems Concepts

Q86. Which of the following statements is not true?

1. a directory is special type of file
2. a directory is used to store file attributes
3. a directory is used to store data
4. a directory is used to store file access information

Correct Answer : 3

Your Answer :

QuestionID : 11277 Subject Name Operating Syatems Concepts

Q87. Which of the Following operating Systems are not available for

non-intel platforms

1. Windows NT
2. Solaris
3. Linux
4. All of the above

Correct Answer : 2

Your Answer :

QuestionID : 11279 Subject Name Operating Syatems Concepts

Q88. LRU and optimal are popular algoritm of page replacement

Correct Answer : T

Your Answer :

QuestionID : 11280 Subject Name Operating Syatems Concepts

Q89. $? gives the PID of last background process, where as $! gives the exit status of the last command executed.

Correct Answer : F

Your Answer :

QuestionID : 11281 Subject Name Operating Syatems Concepts

Q90. SS402>myfile would redirect the standard output and standard error to the myfile.

Correct Answer : F

Your Answer :

QuestionID : 11283 Subject Name Operating Syatems Concepts

Q91. In the systems which do not have multiple CPUS is the cache

coharency is an issue while design.

Correct Answer : F

Your Answer :

QuestionID : 11289 Subject Name Operating Syatems Concepts

Q92. Which of the following Device asychronous

1. SSRAM
2. EPROM
3. Disk Controller
4. all of the above

Correct Answer : 1

Your Answer :

QuestionID : 11291 Subject Name Operating Syatems Concepts

Q93. Suppose the following files are present in the current directory:

ashish arctan dac.doc dim.dwg document

fag fibonacci finder fog folder

sam si.c tarun zenith zombie

Which files would be listed by the following command?

Is fi*

1. fibonacci finder
2. zenith zombie
3. fag zenith fibonacci finder
4. None

Correct Answer : 1

Your Answer :

QuestionID : 11293 Subject Name Operating Syatems Concepts

Q94. Suppose the following files are present in the current directory:

ashish arctan dac.doc dim.dwg document

fag fibonacci finder fog folder

sam si.c tarun zenith zombie

Which files would be listed by the following command?

Is[!fd]*

1. Displays all the files other than those whose names begin with `f`or `d`
2. Displays all the files other than those whose names begin with `f`or `d`or `.c`
3. Display all files
4. None

Correct Answer : 1

Your Answer :

QuestionID : 11294 Subject Name Operating Syatems Concepts

Q95. The I/O subsystem consist of

1. A memory management component includind buffering, caching and spooling
2. A general device driver interface
3. drivers for specific hardware devices
4. All of the above

Correct Answer : 4

Your Answer :

QuestionID : 11299 Subject Name Operating Syatems Concepts

Q96. _____ is the coincidence of high paging traffic and low CPU utilization

1. Thrashing
2. spoolinh
3. swapping
4. All

Correct Answer : 1

Your Answer :

QuestionID : 11301 Subject Name Operating Syatems Concepts

Q97. peak bandwidth of a 64 bit, 33 MHz based PCI bus would be...

1. 133MB/s
2. 266 MB/s
3. 512 MB/s
4. 33 MB/s

Correct Answer : 3

Your Answer :

QuestionID : 11304 Subject Name Operating Syatems Concepts

Q98. x=3 y=5 z=10

```
if [\($x-eq 3\) -a \($y - eq 5 - 0 $z - eq 10\) ]
then
 echo $x
else
 echo $y
```

fi

1. 2
2. 3
3. none
4. 4

Correct Answer : 1

Your Answer :

QuestionID : 11625 Subject Name Operating Syatems Concepts

Q99. SJF is the best sheduling policy

Correct Answer : T

Your Answer :

QuestionID : 11626 Subject Name Operating Syatems Concepts

Q100. Paging allow protection

Correct Answer : F

Q1. The CPU utilization is low when the system is

1. Time sharing
2. Thrashing
3. Multiprocessing
4. None of the above

Correct Answer : 2

Your Answer :

QuestionID : 11071 Subject Name Operating Syatems Concepts

Q2. ------ scheduler selects the process that is ready to execute to CPU.

1. long-term scheduler
2. short-term scheduler
3. medium-term scheduler
4. None of these

Correct Answer : 2

Your Answer :

QuestionID : 11074 Subject Name Operating Syatems Concepts

Q3. LAN covers radius of up to 10 KM

Correct Answer : F

Your Answer :

QuestionID : 11083 Subject Name Operating Syatems Concepts

Q4. A process refers to 5 pages, A,B,C,D & E in the order - A; B; C; D; A; B; E; A; B; C; D; E. If the page replacement algorithm is FIFO,the number of pages which transfer with an emty internal store of 3 frames is

1. 8
2. 10

3. 9

4. 7

Correct Answer : 3

Your Answer :

QuestionID : 11088 Subject Name Operating Syatems Concepts

Q5. Disk request come to a disk driver for cylinders in the order 10,22,20,2,40,6 and 38, at time when the disk drive is reading from cylinder 20.

The seek time is 6 ms per cylinder. the total seek time, if the disk arm sheduling algorithm is first come first served is

1. 360 ms

2. 850 ms

3. 900 ms

4. none of above

Correct Answer : 4

Your Answer :

QuestionID : 11093 Subject Name Operating Syatems Concepts

Q6. SPOOLING stands for simultaneous peripheral operation online.

Correct Answer : T

Your Answer :

QuestionID : 11101 Subject Name Operating Syatems Concepts

Q7. The following is not a form of IPC.

1. semaphore

2. pipe

3. shared memory

4. buffering

Correct Answer : 1

Your Answer :

QuestionID : 11102 Subject Name Operating Syatems Concepts

Q8. Disk request come to a disk driver for cylinders in the order 10,22,20,2,40,6 and 38, at time when the disk drive is reading from cylinder 20.

The seek time is 6 ms per cylinder. the total seek time, if the disk arm sheduling algorithm is closest cylinder next is

1. 360 ms
2. 876 ms
3. 850 ms
4. 900 ms

Correct Answer : 1

Your Answer :

QuestionID : 11105 Subject Name Operating Syatems Concepts

Q9. It is possible to have a deadlock involving only a single process

Correct Answer : F

Your Answer :

QuestionID : 11110 Subject Name Operating Syatems Concepts

Q10. The signal the keyboard sends to the computer is special kind of

message called_____

1. Keyboard request
2. Keyboard controller
3. Interrupt Controller
4. Interrupt Request

Correct Answer : 4

Your Answer :

QuestionID : 11115 Subject Name Operating Syatems Concepts

Q11.

the address sequence generated by a particular program executing in

demand paging with 100 records per page with one free memory

frame is recorded.what is the number of page fault;

100,200,430,499,510,530,560,120,220,240,260,320,370

1. 13
2. 7
3. 8
4. 10

Correct Answer : 4

Your Answer :

QuestionID : 11118 Subject Name Operating Syatems Concepts

Q12. Protection of memory is ensured using ------- and -------.

1. paging,virtual memory
2. base register ,limit register
3. IP egister,hardware register
4. scheduling,synchronization

Correct Answer : 2

Your Answer :

QuestionID : 11119 Subject Name Operating Syatems Concepts

Q13. Which of the following is true?

a) Overlays are used to increase the size of physical memory

b) Overlays are used to increase the logical address space

c) when overlays are used the size of project is not limited to the size of physical memory

d) Overlays are used whenever the physical address space is smaller than the logical address space

1. a and b
2. only c
3. only a
4. none of the above

Correct Answer : 2

Your Answer :

QuestionID : 11122 Subject Name Operating Syatems Concepts

Q14. Banker`s algorithm is an example of Deadlock avoidance.

Correct Answer : T

Your Answer :

QuestionID : 11125 Subject Name Operating Syatems Concepts

Q15. _____ is an example of sharable resource and _____ is an example of non Sharable resouece.

1. Memory,Terminal.
2. Mouse,KeyBoard
3. Monitor,CPU
4. None of above.

Correct Answer : 1

Your Answer :

QuestionID : 11141 Subject Name Operating Syatems Concepts

Q16. Which of the following statement is true?

1. A computer Virus is complete program that makes active attacks.
2. A computer virus is program segment that makes passive attatcks.
3. A logic bomb is program segment that makes passive attacks.

4. A logic bomb is program that makes active attacks.

Correct Answer : 1

Your Answer :

QuestionID : 11148 Subject Name Operating Syatems Concepts

Q17. Which of the following is the most suitable scheduling scheme in real time operating system.

1. round robin
2. first come first served
3. pre-emtive scheduling
4. random scheduling

Correct Answer : 3

Your Answer :

QuestionID : 11165 Subject Name Operating Syatems Concepts

Q18. Bankers algorithm is an example of deadlock avoidance.

Correct Answer : T

Your Answer :

QuestionID : 11167 Subject Name Operating Syatems Concepts

Q19. In the context of concurrent processes ,_____ is used to control the access to shared the data

1. semaphore
2. deadlock
3. monitor
4. ALU

Correct Answer : 1

Your Answer :

QuestionID : 11168 Subject Name Operating Syatems Concepts

Q20. Which of the following are single user Operating Systems.

1. MS-DOS Only
2. Unix
3. MS-DOS,Xenix
4. OS/2.

Correct Answer : 3

Your Answer :

QuestionID : 11172 Subject Name Operating Syatems Concepts

Q21. Andrew and Sprite are examples of Distributed operating system.

Correct Answer : T

Your Answer :

QuestionID : 11180 Subject Name Operating Syatems Concepts

Q22. During system stratup,program execution begin at address FFFOH

Correct Answer : T

Your Answer :

QuestionID : 11182 Subject Name Operating Syatems Concepts

Q23. In Round robin CPU scheduling as the time quantum is incresed

the average turn around time ....

1. Increases
2. Decreases
3. Varies
4. Varies irregularly.

Correct Answer : 4

Your Answer :

QuestionID : 11186 Subject Name Operating Syatems Concepts

Q24. The size of virtual memory depends on the size of the

1. data bus
2. main memory
3. address bus
4. none

Correct Answer : 3

Your Answer :

QuestionID : 11189 Subject Name Operating Syatems Concepts

Q25. In paged memory system if the page size is increased then internal fragmentation generally.

1. becomes less
2. becomes more
3. remains constant
4. none of the above

Correct Answer : 2

Your Answer :

QuestionID : 11193 Subject Name Operating Syatems Concepts

Q26. A_____ operating system is an operating syatem which

requires a timely response from a computer system

1. Batch os
2. Workstation
3. a and b
4. None of the above

Correct Answer : 4

Your Answer :

QuestionID : 11195 Subject Name Operating Syatems Concepts

Q27. Suppose the architecture of a computer system

is layered into the following four layers:-

1. Operating System software.
2. users application software.
3. hardware and programming environment software.
4. all of the above.

Correct Answer : 4

Your Answer :

QuestionID : 11201 Subject Name Operating Syatems Concepts

Q28. Following is not a IPC

1. semaphore
2. pipe
3. shared memory
4. Buffering

Correct Answer : 1

Your Answer :

QuestionID : 11203 Subject Name Operating Syatems Concepts

Q29. The protected mode is necessary for :-

1. Multitasking system.
2. Multiuser System.
3. both 1 & 2
4. 16 bit programming.

Correct Answer : 1

Your Answer :

QuestionID : 11204 Subject Name Operating Syatems Concepts

Q30. _____ sheduler select the process that is ready to execute to CPU.

1. Long term
2. Short term
3. medium term
4. none of above

Correct Answer : 2

Your Answer :

QuestionID : 11217 Subject Name Operating Syatems Concepts

Q31. Which of the following page replacement algorithms

suffers from Belady`s anomaly?

1. Optimal replacement
2. LRU
3. FIFO
4. Both optimal replacement and FIFO

Correct Answer : 3

Your Answer :

QuestionID : 11233 Subject Name Operating Syatems Concepts

Q32. Which of the following statement is true for dead lock?

1. The system can not run any process.
2. The system can not run any process barring all those involved in the deadlock?
3. A running process can not request any new response.
4. All processes in the ready queue enter the wait.

Correct Answer : 1

Your Answer :

QuestionID : 11234 Subject Name Operating Syatems Concepts

Q33. The time of admission of a job to ready queue to completion is _____ .

1. turn-arround time
2. burst time
3. response time
4. None of above

Correct Answer : 1

Your Answer :

QuestionID : 11245 Subject Name Operating Syatems Concepts

Q34. The segmented memory is provided mainly

1. for higher speeds
2. to maintain compatibity with old processors
3. for ease of application programming
4. simple hardware

Correct Answer : 1

Your Answer :

QuestionID : 11249 Subject Name Operating Syatems Concepts

Q35. Which of the following is not features of RISC architecture.

1. A limited instruction set.
2. A large number of registers.
3. Virtual memory
4. The large number of execution modes.

Correct Answer : 2

Your Answer :

QuestionID : 11250 Subject Name Operating Syatems Concepts

Q36. single system image is obtained in case of Distributed system

Correct Answer : T

Your Answer :

QuestionID : 11251 Subject Name Operating Syatems Concepts

Q37. Unix is a Multiuser,Multitasking,Multiprocessing Operating system.

Correct Answer : T

Your Answer :

QuestionID : 11252 Subject Name Operating Syatems Concepts

Q38. Device Controller is a Hardware

Correct Answer : F

Your Answer :

QuestionID : 11262 Subject Name Operating Syatems Concepts

Q39. Which schedular selects the process that is ready toexecute to CPU.

1. long term schedular
2. mid-term schedular
3. short-term schedular
4. any schedular does not do that task

Correct Answer : 3

Your Answer :

QuestionID : 11272 Subject Name Operating Syatems Concepts

Q40. which of the following is false

1. deadlock state is unsafe
2. unsafe state may lead to deadlock situation
3. unsafe state must lead to deadlock situation
4. deadlock system is subset of unsafe system

Correct Answer : 3

Your Answer :

QuestionID : 11275 Subject Name Operating Syatems Concepts

Q41. a demand paging system with page table held in registers takes 5 milli sec to service a page fault, if an empty page is available,

or if page to be replaced is not dirty. It takes 50 milli sec if the replaced page is dirty. memory access time is 1 micro sec,

assume we want an effective access time of 2 micro sec and that page to be replaced is dirty 60% of time, what is the approximate

maximum acceptible page fault rate to meet this access time requirement

1. 0.1%
2. 1.0%
3. 2.5%
4. 0.01%

Correct Answer : 4

Your Answer :

QuestionID : 11284 Subject Name Operating Syatems Concepts

Q42. The interval from the time of submission of a process to the time of completion is

1. Turnaround time
2. waiting time
3. response time
4. none of these

Correct Answer : 1

Your Answer :

QuestionID : 11285 Subject Name Operating Syatems Concepts

Q43. Locality of reference implies that the page reference being made by a process

1. will always be to the page used in previous page refernce

2. is likely to be one of the pages used in the last few page references

3. will always be one of the pages existing in memory

4. will always lead to a page fault

Correct Answer : 2

Your Answer :

QuestionID : 11295 Subject Name Operating Syatems Concepts

Q44. Suppose the following files are present in the current directory:

ashish arctan dac.doc dim.dwg document

fag fibonacci finder fog folder

sam si.c tarun zenith zombie

Which files would be listed by the following command?

Is [!0-9][!asd]*

1. Display all the files whose first character is other than a digit and the second character is other than `a`, `s` or `d`

2. Display all the files whose first character is other than a digit and the second character is other than `a`, `s`

3. Display all the files

4. None of the above

Correct Answer : 1

Your Answer :

QuestionID : 11296 Subject Name Operating Syatems Concepts

Q45. The signal the keyboard sends to the computer is a special kind of

message called _____

1. Keyboard request

2. Keyboard controller

3. Interrupt controller
4. Interrupt request

Correct Answer : 4

Your Answer :

QuestionID : 11303 Subject Name Operating Syatems Concepts

Q46. b=

[-n $b]

echo $?

[-z $b]

echo $?

1. Will run fine
2. test : argument expected
3. error
4. none

Correct Answer : 2

Your Answer :

QuestionID : 11308 Subject Name Operating Syatems Concepts

Q47. A space allocated in units of fixed size is called block

Correct Answer : T

Your Answer :

QuestionID : 11310 Subject Name Operating Syatems Concepts

Q48. Circuit switching has two variants -connection oriented and connectionless

Correct Answer : F

Your Answer :

QuestionID : 11623 Subject Name Operating Syatems Concepts

Q49. It is possible to have a dead lock involving only a single process

Correct Answer : F

Your Answer :

QuestionID : 12261 Subject Name Operating Syatems Concepts

Q50. The _____ decodes an instruction and generates an electrical signal

1. Arithematic and logic unit
2. Main Memory
3. Bios
4. Control Unit

Correct Answer : 4

Q1. Tape is magnetic device.

Correct Answer : T

Your Answer :

QuestionID : 11070 Subject Name Operating Syatems Concepts

Q2. During the process of loading the program, a _____ modifies the actual instruction so that the effect of load address is taken into account

1. resource locator
2. loader
3. relocating loader
4. relocation register

Correct Answer : 4

Your Answer :

QuestionID : 11072 Subject Name Operating Syatems Concepts

Q3. Relocation and address translation can be achieved with the help of paging

Correct Answer : T

Your Answer :

QuestionID : 11074 Subject Name Operating Syatems Concepts

Q4. LAN covers radius of up to 10 KM

Correct Answer : F

Your Answer :

QuestionID : 11078 Subject Name Operating Syatems Concepts

Q5. time sharing system uses round robin scheduling algorithmn.

Correct Answer : T

Your Answer :

QuestionID : 11084 Subject Name Operating Syatems Concepts

Q6. If the scheduling policy is FCFS the average waiting time will be?

1. 12.8 ms
2. 8 ms
3. 16 ms
4. none of the above

Correct Answer : 1

Your Answer :

QuestionID : 11090 Subject Name Operating Syatems Concepts

Q7. Spatial locality refers to the problem that once a

location is referenced

1. it will not be referenced again.
2. it will be referenced again.
3. A nearby location will be referenced soon.
4. none of the above.

Correct Answer : 3

Your Answer :

QuestionID : 11099 Subject Name Operating Syatems Concepts

Q8. With a single resource deadlock occures

1. if there are more than two processes computing for that resource
2. if there are only than two processes computing for that resource
3. if there are a single process computing for that resource
4. None of the above

Correct Answer : 4

Your Answer :

QuestionID : 11106 Subject Name Operating Syatems Concepts

Q9. NRU stands for NOT RECENTLY USED & LRU stands for LEAST RECENTLY USED

Correct Answer : T

Your Answer :

QuestionID : 11109 Subject Name Operating Syatems Concepts

Q10. The following is a part of FAT.

1. Sector info.
2. Disk type
3. Modified info.
4. Date info.

Correct Answer : 1

Your Answer :

QuestionID : 11111 Subject Name Operating Syatems Concepts

Q11. Time elapsed for position of Read / Write head under the desired sector is called?

1. Seek Time
2. Latency Time
3. Turnaround Time
4. None of above

Correct Answer : 2

Your Answer :

QuestionID : 11115 Subject Name Operating Syatems Concepts

Q12.

the address sequence generated by a particular program executing in

demand paging with 100 records per page with one free memory

frame is recorded.what is the number of page fault;

100,200,430,499,510,530,560,120,220,240,260,320,370

1. 13
2. 7
3. 8
4. 10

Correct Answer : 4

Your Answer :

QuestionID : 11125 Subject Name Operating Syatems Concepts

Q13. _____ is an example of sharable resource and _____ is an example of non Sharable resouece.

1. Memory,Terminal.
2. Mouse,KeyBoard
3. Monitor,CPU
4. None of above.

Correct Answer : 1

Your Answer :

QuestionID : 11126 Subject Name Operating Syatems Concepts

Q14. Round-Robbin understands priority?

Correct Answer : F

Your Answer :

QuestionID : 11132 Subject Name Operating Syatems Concepts

Q15. Critical region is

1. a part of operating system which is not allowed to be accessed by any process.
2. a set of instructions that access common shared resource which exclude one another in time.
3. the portion of main memory which can be accessed only by one process at a time.
4. None of the above.

Correct Answer : 2

Your Answer :

QuestionID : 11133 Subject Name Operating Syatems Concepts

Q16. Pipe is the mechanism whereby the output of one process is directed into input of another process

Correct Answer : T

Your Answer :

QuestionID : 11136 Subject Name Operating Syatems Concepts

Q17. Efficient operation of computer system and Convinience for user

are the goals of operating system.

Correct Answer : T

Your Answer :

QuestionID : 11138 Subject Name Operating Syatems Concepts

Q18. Which of the following cpu schedulling algorithms will prevented stravation?

1. shortest-job-first
2. priority schedulling algorithm
3. priority schedulling will againg mechanism
4. none

Correct Answer : 3

Your Answer :

QuestionID : 11140 Subject Name Operating Syatems Concepts

Q19. The first-fit,best-fit,worst-fit algorithm can be used for

1. Contiguous memory allocation
2. Linked memory allocation
3. Indexed memory allocation
4. All of the above

Correct Answer : 1

Your Answer :

QuestionID : 11141 Subject Name Operating Syatems Concepts

Q20. Which of the following statement is true?

1. A computer Virus is complete program that makes active attacks.
2. A computer virus is program segment that makes passive attatcks.
3. A logic bomb is program segment that makes passive attacks.
4. A logic bomb is program that makes active attacks.

Correct Answer : 1

Your Answer :

QuestionID : 11145 Subject Name Operating Syatems Concepts

Q21. A file system uses the contiguous space allocation mechanism for disk allocation .For better utilization of disk space ,this file system must use

1. A garbage collection mechanism
2. A disk compaction mechanism
3. A linked-block allocation mechanism
4. An indexed-block allocation mechanism

Correct Answer : 4

Your Answer :

QuestionID : 11150 Subject Name Operating Syatems Concepts

Q22. If the C.P.U. scheduling Policy is priority scheduing without the

pre-emption the average waiting time will be_____

1. 12.8 ms
2. 11.8 ms
3. 10.8 ms

4. none of the above

Correct Answer : 3

Your Answer :

QuestionID : 11153 Subject Name Operating Syatems Concepts

Q23. A purpose of virtual memory system is to

1. Allow multiprocessing
2. Allow multiprogramming
3. Allow batch processing
4. Allow execution of program that larger memory than the size of the physical main memory.

Correct Answer : 4

Your Answer :

QuestionID : 11157 Subject Name Operating Syatems Concepts

Q24. At a perticular time of computation the value of counting semaphore

is 7. Then 20 `p` operation abd x `v` operation were completed on this semaphore.

If the final value of the semaphore is 5, x will be...

1. 15
2. 22
3. 18
4. 13

Correct Answer : 3

Your Answer :

QuestionID : 11160 Subject Name Operating Syatems Concepts

Q25. An OS is the interface between Hardware and user.

Correct Answer : T

Your Answer :

QuestionID : 11161 Subject Name Operating Syatems Concepts

Q26. The main purpose(s)of an operating system is/are_____

1. Convenience for the user.
2. Efficient operation of the Computer system.
3. Optimal use of Computer resources.
4. All of the above

Correct Answer : 4

Your Answer :

QuestionID : 11167 Subject Name Operating Syatems Concepts

Q27. In the context of concurrent processes ,_____ is used to control the access to shared the data

1. semaphore
2. deadlock
3. monitor
4. ALU

Correct Answer : 1

Your Answer :

QuestionID : 11171 Subject Name Operating Syatems Concepts

Q28. Memory protection is of no use in a ...

1. single user system
2. non-multiprogramming system
3. non-multitasking system
4. none of above

Correct Answer : 4

Your Answer :

QuestionID : 11183 Subject Name Operating Syatems Concepts

Q29. Cascading Termination refers to termination of all child processes before parent terminates

1. normally
2. abnormally
3. normally and abnormally
4. none of above

Correct Answer : 4

Your Answer :

QuestionID : 11186 Subject Name Operating Syatems Concepts

Q30. The size of virtual memory depends on the size of the

1. data bus
2. main memory
3. address bus
4. none

Correct Answer : 3

Your Answer :

QuestionID : 11187 Subject Name Operating Syatems Concepts

Q31. `Aging` is

1. keeping track of cache contents
2. keeping track of what pages are currently residing in the memory
3. keeping track how many times the given page is refrenced
4. increasing the priority of jobs to ensure termination in a finite time

Correct Answer : 4

Your Answer :

QuestionID : 11190 Subject Name Operating Syatems Concepts

Q32. Which of the following CPU scheduling algorithms will prevent starvation problem?

1. shortest job first
2. priority scheduling
3. priority scheduling with aging mechanism
4. none of the above

Correct Answer : 3

Your Answer :

QuestionID : 11197 Subject Name Operating Syatems Concepts

Q33. If property of locality of reference is well pronounced in a

program

1. number of page faults will be more.
2. number of page faults will be less and execution will be faster.
3. number of page faults will remain same.
4. none of the above.

Correct Answer : 2

Your Answer :

QuestionID : 11199 Subject Name Operating Syatems Concepts

Q34. Which of the following is not a part of a process control block(PCB).

1. Values of a CPU registers
2. CPU Scheduling information
3. Memory limits of the process
4. List of files accessible to the proces.

Correct Answer : 4

Your Answer :

QuestionID : 11201 Subject Name Operating Syatems Concepts

Q35. Following is not a IPC

1. semaphore
2. pipe
3. shared memory
4. Buffering

Correct Answer : 1

Your Answer :

QuestionID : 11218 Subject Name Operating Syatems Concepts

Q36. In partitioned memory allocation scheme the _____

1. Best fit Algorithm is always better then the first fit algorithm.
2. First fit Algorithm is always better then the Best fit algorithm.
3. Superiority of the first fit & best fit depends

on the sequence of memory request .

4. none of the above.

Correct Answer : 3

Your Answer :

QuestionID : 11223 Subject Name Operating Syatems Concepts

Q37. If there are 32 segments ,each of size 1 kbytes,then the logical

address should have-----.

1. 13 bits
2. 14 bits
3. 15 bits
4. 16 bits

Correct Answer : 3

Your Answer :

QuestionID : 11224 Subject Name Operating Syatems Concepts

Q38. Which of the following are RTOS ?

1. An on-line railway reservation system
2. A process control system.
3. Aircraft control system.
4. Payroll processing system.

Correct Answer : 3

Your Answer :

QuestionID : 11235 Subject Name Operating Syatems Concepts

Q39. The Motivations Behind Networks are

1)Resource Sharing

2)Computation Speedup

3)Reliability

4)Communication

1. 1,2
2. 1,3
3. only 3
4. All the Above

Correct Answer : 4

Your Answer :

QuestionID : 11244 Subject Name Operating Syatems Concepts

Q40. Round Robin is an example of timesharing scheduling policy.

Correct Answer : T

Your Answer :

QuestionID : 11261 Subject Name Operating Syatems Concepts

Q41. In a paged memory the page hit ratio is 0.35.The time required to access a page in secondary memory is equal to 100ns.

the time required to access a page in primary memory is 10ns.The average time required to access a page is

1. 3.0ns
2. 68.0ns
3. 68.5ns
4. 78.5ns

Correct Answer : 3

Your Answer :

QuestionID : 11264 Subject Name Operating Syatems Concepts

Q42. The problem of Thrashing may be reduced by _____

1. using prepaging mechanism
2. writing well structured programs
3. both 1 & 2
4. neither 1 & 2

Correct Answer : 3

Your Answer :

QuestionID : 11266 Subject Name Operating Syatems Concepts

Q43. The problem of thrashing may be reduced by

1. Using prepaging mechanism
2. writing well structured program.
3. Both 1 & 2
4. Neither 1 & 2

Correct Answer : 3

Your Answer :

QuestionID : 11272 Subject Name Operating Syatems Concepts

Q44. which of the following is false

1. deadlock state is unsafe
2. unsafe state may lead to deadlock situation
3. unsafe state must lead to deadlock situation
4. deadlock system is subset of unsafe system

Correct Answer : 3

Your Answer :

QuestionID : 11274 Subject Name Operating Syatems Concepts

Q45. If filenames are supplied as arguments to a script rm"$@" would remove all files supplied as arguments.

Correct Answer : T

Your Answer :

QuestionID : 11277 Subject Name Operating Syatems Concepts

Q46. Which of the Following operating Systems are not available for

non-intel platforms

1. Windows NT
2. Solaris
3. Linux
4. All of the above

Correct Answer : 2

Your Answer :

QuestionID : 11284 Subject Name Operating Syatems Concepts

Q47. The interval from the time of submission of a process to the time of completion is

1. Turnaround time
2. waiting time
3. response time
4. none of these

Correct Answer : 1

Your Answer :

QuestionID : 11285 Subject Name Operating Syatems Concepts

Q48. Locality of reference implies that the page reference being made by a process

1. will always be to the page used in previous page refernce
2. is likely to be one of the pages used in the last few page references
3. will always be one of the pages existing in memory
4. will always lead to a page fault

Correct Answer : 2

Your Answer :

QuestionID : 11309 Subject Name Operating Syatems Concepts

Q49. Single system image is obtained in case of ----

1. desktop
2. Distributed
3. network
4. none

Correct Answer : 2

Your Answer :

QuestionID : 11310 Subject Name Operating Syatems Concepts

Q50. Circuit switching has two variants -connection oriented and

connectionless

Correct Answer : F

Q1. The cpu utilization is low when the system is

1. executing
2. thrasing
3. waiting
4. all of the above

Correct Answer : 2

Your Answer :

QuestionID : 11065 Subject Name Operating Syatems Concepts

Q2. A programm can execute more than once simultaneously is called

1. re-executable
2. re-entrant
3. multiprogramming
4. none of the above

Correct Answer : 2

Your Answer :

QuestionID : 11068 Subject Name Operating Syatems Concepts

Q3. All the entries in FAT corresponds to clusters

Correct Answer : T

Your Answer :

QuestionID : 11071 Subject Name Operating Syatems Concepts

Q4. ------ scheduler selects the process that is ready to execute to CPU.

1. long-term scheduler
2. short-term scheduler
3. medium-term scheduler
4. None of these

Correct Answer : 2

Your Answer :

QuestionID : 11074 Subject Name Operating Syatems Concepts

Q5. LAN covers radius of up to 10 KM

Correct Answer : F

Your Answer :

QuestionID : 11089 Subject Name Operating Syatems Concepts

Q6. Semaphores are used to solve the problem of

1. Race condition
2. process syncronisation
3. mutual exclusion
4. both b&c

Correct Answer : 4

Your Answer :

QuestionID : 11094 Subject Name Operating Syatems Concepts

Q7. SPOOLING stands for _____

1. Simultaneous Peripheral Operations OnLine
2. Spontaneous Peripheral Operations OnLine
3. Serial

Peripheral Operations OnLine

4. None of the above

Correct Answer : 1

Your Answer :

QuestionID : 11097 Subject Name Operating Syatems Concepts

Q8. Which of the following is true?

a) the linkage editor is used to edit programs which have to be later linked together

b) the linkage editor links object modules during compiling or assembling

c) the linkage editor links object modules and resolves external references between them before loading

d) the linkage editor resolves external references between the object modules during execution time

1. only c
2. a and c
3. only b
4. all of the above

Correct Answer : 1

Your Answer :

QuestionID : 11099 Subject Name Operating Syatems Concepts

Q9. With a single resource deadlock occures

1. if there are more than two processes computing for that resource
2. if there are only than two processes computing for that resource
3. if there are a single process computing for that resource
4. None of the above

Correct Answer : 4

Your Answer :

QuestionID : 11105 Subject Name Operating Syatems Concepts

Q10. It is possible to have a deadlock involving only a single process

Correct Answer : F

Your Answer :

QuestionID : 11107 Subject Name Operating Syatems Concepts

Q11. _____ is a significant factor in maintaining fragmentation

within usable limits

1. External Fragmentation
2. Paging
3. Coalescing of holes
4. Both 2 and 3

Correct Answer : 4

Your Answer :

QuestionID : 11108 Subject Name Operating Syatems Concepts

Q12. Pre-emptive scheduling is the strategy of temporarily suspending a running process

1. before the cpu time slice expires
2. to allow starving process to run
3. when it request i/o
4. none of the above

Correct Answer : 1

Your Answer :

QuestionID : 11112 Subject Name Operating Syatems Concepts

Q13. When fork() is given-

1. it creates a child process
2. allocates slot in process table
3. returns 0 to parent & ID to child
4. All of the above.

Correct Answer : 1

Your Answer :

QuestionID : 11125 Subject Name Operating Syatems Concepts

Q14. _____ is an example of sharable resource and _____ is an example of non Sharable resouece.

1. Memory,Terminal.
2. Mouse,KeyBoard
3. Monitor,CPU
4. None of above.

Correct Answer : 1

Your Answer :

QuestionID : 11137 Subject Name Operating Syatems Concepts

Q15. When fork() is given-

1. it creates a child process.
2. Allocates slot in process table.
3. returns 0 to parent and ID to child.
4. all of the above.

Correct Answer : 4

Your Answer :

QuestionID : 11138 Subject Name Operating Syatems Concepts

Q16. Which of the following cpu schedulling algorithms will prevented stravation?

1. shortest-job-first
2. priority schedulling algorithm
3. priority schedulling will againg mechanism
4. none

Correct Answer : 3

Your Answer :

QuestionID : 11141 Subject Name Operating Syatems Concepts

Q17. Which of the following statement is true?

1. A computer Virus is complete program that makes active attacks.
2. A computer virus is program segment that makes passive attatcks.
3. A logic bomb is program segment that makes passive attacks.
4. A logic bomb is program that makes active attacks.

Correct Answer : 1

Your Answer :

QuestionID : 11144 Subject Name Operating Syatems Concepts

Q18. The time of admission of job to ready queue to completion is_____

1. Turnaround time
2. Burst time
3. Response time
4. None of the above.

Correct Answer : 1

Your Answer :

QuestionID : 11149 Subject Name Operating Syatems Concepts

Q19. The fastest strogage element is?

1. CDRAM
2. DRAM
3. EDO-DRAM
4. SDRAM

Correct Answer : 2

Your Answer :

QuestionID : 11151 Subject Name Operating Syatems Concepts

Q20. Which of the following CPU scheduling algorithm will prevent starvation

problem.

1. shortest-job-first
2. priority scheduling
3. priority scheduling with aging mechanism
4. None of the above

Correct Answer : 3

Your Answer :

QuestionID : 11152 Subject Name Operating Syatems Concepts

Q21. Kernel is

1. considered as critical part of operating system.
2. software which monitors operating system.
3. set of primitive functions upon which rest of operating system functions are built up.
4. none of the above.

Correct Answer : 3

Your Answer :

QuestionID : 11157 Subject Name Operating Syatems Concepts

Q22. At a perticular time of computation the value of counting semaphore

is 7. Then 20 `p` operation abd x `v` operation were completed on this semaphore.

If the final value of the semaphore is 5, x will be...

1. 15
2. 22
3. 18
4. 13

Correct Answer : 3

Your Answer :

QuestionID : 11170 Subject Name Operating Syatems Concepts

Q23. The process of loading the os into the main memory is done

by the bootstrap loader.

Correct Answer : T

Your Answer :

QuestionID : 11193 Subject Name Operating Syatems Concepts

Q24. A_____ operating system is an operating syatem which

requires a timely response from a computer system

1. Batch os
2. Workstation
3. a and b
4. None of the above

Correct Answer : 4

Your Answer :

QuestionID : 11194 Subject Name Operating Syatems Concepts

Q25. following is a path under execution

1. directory
2. file
3. thread
4. all

Correct Answer : 3

Your Answer :

QuestionID : 11202 Subject Name Operating Syatems Concepts

Q26. Supervisor call

1. is call made by supervisor of the system

2. is a call with control functions

3. are previlaged calls that are used to perform resource management functions which are controlled by operating system.

4. is a call made by someone working in root directory.

Correct Answer : 3

Your Answer :

QuestionID : 11217 Subject Name Operating Syatems Concepts

Q27. Which of the following page replacement algorithms

suffers from Belady`s anomaly?

1. Optimal replacement

2. LRU

3. FIFO

4. Both optimal replacement and FIFO

Correct Answer : 3

Your Answer :

QuestionID : 11227 Subject Name Operating Syatems Concepts

Q28. DOS is an example of ..... user system

1. Multiuser system

2. Single user system

3. both 1 and 2

4. none of the above

Correct Answer : 2

Your Answer :

QuestionID : 11246 Subject Name Operating Syatems Concepts

Q29. Blocking primitives are also called as synchronous communication

Correct Answer : T

Your Answer :

QuestionID : 11248 Subject Name Operating Syatems Concepts

Q30. which of the following is page replacement algorithim

1. FIFO Page replacement
2. LRU
3. optimal page replacement
4. all

Correct Answer : 4

Your Answer :

QuestionID : 11250 Subject Name Operating Syatems Concepts

Q31. single system image is obtained in case of Distributed system

Correct Answer : T

Your Answer :

QuestionID : 11251 Subject Name Operating Syatems Concepts

Q32. Unix is a Multiuser,Multitasking,Multiprocessing Operating system.

Correct Answer : T

Your Answer :

QuestionID : 11252 Subject Name Operating Syatems Concepts

Q33. Device Controller is a Hardware

Correct Answer : F

Your Answer :

QuestionID : 11255 Subject Name Operating Syatems Concepts

Q34. Consider a system having m resources of same type.The resources are shared by

3 processes A,B ,C which have peak time demands of 3,4,6 respctively.The minimum value of m that ensures that deadlock will never occur is

1. 11
2. 12
3. 13
4. 14

Correct Answer : 1

Your Answer :

QuestionID : 11256 Subject Name Operating Syatems Concepts

Q35. The context of a process is the union of its

1. region table,uarea,system level context & user level context
2. register context,pregion table,user level context
3. System level context,register context,user level context
4. process table,user level context,register context

Correct Answer : 1

Your Answer :

QuestionID : 11268 Subject Name Operating Syatems Concepts

Q36. m processes share n resources of the same type .The maximum need of each process does not exceed n and the sum of all their maximum needs is always less than m+n.In this set up deadlock --------.

1. can never occur
2. may occur
3. has to occur
4. none of the above

Correct Answer : 1

Your Answer :

QuestionID : 11270 Subject Name Operating Syatems Concepts

Q37. Within `` piping and redirection metacharacters cannot be used.

Correct Answer : F

Your Answer :

QuestionID : 11271 Subject Name Operating Syatems Concepts

Q38. Unix is the example of the Distributed operating system

Correct Answer : T

Your Answer :

QuestionID : 11272 Subject Name Operating Syatems Concepts

Q39. which of the following is false

1. deadlock state is unsafe
2. unsafe state may lead to deadlock situation
3. unsafe state must lead to deadlock situation
4. deadlock system is subset of unsafe system

Correct Answer : 3

Your Answer :

QuestionID : 11275 Subject Name Operating Syatems Concepts

Q40. a demand paging system with page table held in registers takes 5 milli sec to service a page fault, if an empty page is available,

or if page to be replaced is not dirty. It takes 50 milli sec if the replaced page is dirty. memory access time is 1 micro sec,

assume we want an effective access time of 2 micro sec and that page to be replaced is dirty 60% of time, what is the approximate

maximum acceptible page fault rate to meet this access time requirement

1. 0.1%

2. 1.0%

3. 2.5%

4. 0.01%

Correct Answer : 4

Your Answer :

QuestionID : 11282 Subject Name Operating Syatems Concepts

Q41. Round Robin algorithm is an example timesharing scheduling policy.

Correct Answer : T

Your Answer :

QuestionID : 11285 Subject Name Operating Syatems Concepts

Q42. Locality of reference implies that the page reference being made by a process

1. will always be to the page used in previous page refernce

2. is likely to be one of the pages used in the last few page references

3. will always be one of the pages existing in memory

4. will always lead to a page fault

Correct Answer : 2

Your Answer :

QuestionID : 11287 Subject Name Operating Syatems Concepts

Q43. Th e correct matching of the following pairs :

A. disk sccheduling 1.round robin

B. batch processing 2.scan

C. time sharing 3. LIFO

D. interrupt processing 4.FIFO

1. A-3,B-4,C-2,D-1

2. A-4,B-3,C-2,D-1

3. A-2,B-4,C-1,D-3

4. A-2,B-1,C-4,D-3

Correct Answer : 3

Your Answer :

QuestionID : 11290 Subject Name Operating Syatems Concepts

Q44. Mutex is an acronym for Mutual Exclusion.

Correct Answer : T

Your Answer :

QuestionID : 11302 Subject Name Operating Syatems Concepts

Q45. Main advantage of EISA bus over micro channel bus was:

1. it offered more bandwidth over micro channel

2. it had software configurable devices

3. it was backward compatible with ISA

4. it made the existing peripherals run faster

Correct Answer : 2

Your Answer :

QuestionID : 11306 Subject Name Operating Syatems Concepts

Q46. Multiprograming degenrates to time sharing system

if there is no proper mix of CPU and i/o bound jobs

Correct Answer : F

Your Answer :

QuestionID : 11309 Subject Name Operating Syatems Concepts

Q47. Single system image is obtained in case of ----

1. desktop

2. Distributed

3. network

4. none

Correct Answer : 2

Your Answer :

QuestionID : 11310 Subject Name Operating Syatems Concepts

Q48. Circuit switching has two variants -connection oriented and connectionless

Correct Answer : F

Your Answer :

QuestionID : 11311 Subject Name Operating Syatems Concepts

Q49. 80826 the addressing schema is _____ addressing

1. 8 bit

2. 16 bit

3. 24 bit

4. 28 bit

Correct Answer : 3

Your Answer :

QuestionID : 11624 Subject Name Operating Syatems Concepts

Q50. Unix is a network operating system

Correct Answer : T

Q1. OPTIND and OPTARG are unix defined variables.

Correct Answer : T

Your Answer :

QuestionID : 11327 Subject Name Linux

Q2. If shell script is called from antohter then the called shell script should necessarily have a return statement.

Correct Answer : F

Your Answer :

QuestionID : 11330 Subject Name Linux

Q3. An argument to the option cannot begin with a minu sign.

Correct Answer : F

Your Answer :

QuestionID : 11340 Subject Name Linux

Q4. Hidden files in Unix always begin with a character " . "

Correct Answer : T

Your Answer :

QuestionID : 11353 Subject Name Linux

Q5. The shell performs command substitution before filename substitution

Correct Answer : F

Your Answer :

QuestionID : 11366 Subject Name Linux

Q6. All device related files are present in /dev directory.

Correct Answer : T

Your Answer :

QuestionID : 11369 Subject Name Linux

Q7. what would be the output of the following program:

name=Sanjay

surname=khare

echo{name=rahul}

echo{middlename+Rahul}

echo${surname-Arora}

1. Sanjay

Blank line

Khare

2. Khare

Blank line

sanjay

3. error

4. none of the above

Correct Answer : 1

Your Answer :

QuestionID : 11379 Subject Name Linux

Q8. What would be the output of the following?

name=Sanjay

surname=khare

echo${name-Rahul}

echo${middlename-Rahul}

echo${surname+Arora}

echo${newname+Arora}

1. Sanjay

Rahul

Arora

Blank line

2. Blank line

Sanjay

Arora

Rahul

3. error

4. now of the above

Correct Answer : 1

Your Answer :

QuestionID : 11394 Subject Name Linux

Q9. How would you perform the following operation on the contents of a given file.

Replace one or more spaces with a single space

1. 1,$s/[][]*/[]/g

2. 1,$s/[]*/[]/g

3. 1,$s/[][]+/[]/g

4. 1,$s/[]+/[]/g

Correct Answer : 1

Your Answer :

QuestionID : 11401 Subject Name Linux

Q10. Using for loop we can calculate factorial value .

Correct Answer : F

Your Answer :

QuestionID : 11402 Subject Name Linux

Q11. How would you perform the following operations on the contents of a given file.

Replace one or more spaces following a fullstop or a comma with two spaces

1. 1,$s/[.,][][]*/[][]/g
2. 1,$s,[.][,][][]*/[][]/g
3. 1,$s/[.,][]*/[]/g
4. 1,$s/[.,][][]+/[]/g

Correct Answer : 1

Your Answer :

QuestionID : 11410 Subject Name Linux

Q12. If in a script value of IFS is changed to : after execcution of script

the value of IFS is automatically set back to original value

1. True
2. False
3. Can not say
4. Partly True Partly False

Correct Answer : 4

Your Answer :

QuestionID : 11421 Subject Name Linux

Q13. To logout from your terminal you

1. Switch off the terminal
2. Press ctrl -d or type exit
3. press ctrl-Alt-Del
4. do nothing it is the system administrator who would do this for you

Correct Answer : 2

Your Answer :

QuestionID : 11422 Subject Name Linux

Q14. The difference between the commands ps -e and ps -a is

1. ps -e gives detail of every process running in memory whereas ps -a gives output for all the process that you have launched.

2. ps -e gives details of every process running in memory whereas ps -a gives details of all user processes.

3. No difference,both give same output.

4. None of the above.

Correct Answer : 2

Your Answer :

QuestionID : 11423 Subject Name Linux

Q15. A single UNIX file System can be split over multiple harh disks

Correct Answer : F

Your Answer :

QuestionID : 11424 Subject Name Linux

Q16. What is the output of following program segments?

```
n="ask me"

echo $n

echo "$n"

echo `$n`
```

1. ask me

ask me

$n

2. ask me

$n

ask me

3. ask me

4. $n

Correct Answer : 1

Your Answer :

QuestionID : 11425 Subject Name Linux

Q17. Purpose of .exrc file is convinient way to customize the vi environment and like all good things you shold put it to utmost use to improve your efficiency .

Correct Answer : T

Your Answer :

QuestionID : 11427 Subject Name Linux

Q18. You can execute shell script onces it has be typed

Correct Answer : F

Your Answer :

QuestionID : 11433 Subject Name Linux

Q19. To create files of large size in UNIX file System it is preferable to have blocks of large size

Correct Answer : T

Your Answer :

QuestionID : 11447 Subject Name Linux

Q20. AABBCC is a valid password

Correct Answer : F

Your Answer :

QuestionID : 11452 Subject Name Linux

Q21. To change our existing password we can execute the file /etc/passwd

Correct Answer : F

Your Answer :

QuestionID : 11453 Subject Name Linux

Q22. Every legal user has to have a login id and a password

Correct Answer : T

Your Answer :

QuestionID : 11461 Subject Name Linux

Q23. Any Shell script by default get executed in the current shell

Correct Answer : F

Your Answer :

QuestionID : 11466 Subject Name Linux

Q24. echo statements output can be redirected to file

Correct Answer : F

Your Answer :

QuestionID : 11469 Subject Name Linux

Q25. to search a pattern which starts with uni the command would be

1. :/ < uni
2. :/\ < uni
3. : / \ < uni >
4. none

Correct Answer : 2

Your Answer :

QuestionID : 11471 Subject Name Linux

Q26. A shell variable can not handled negative value

Correct Answer : F

Your Answer :

QuestionID : 11474 Subject Name Linux

Q27. to delete 5 lines from file & to copy them to buffer x we use "x5dd

Correct Answer : T

Your Answer :

QuestionID : 11482 Subject Name Linux

Q28. The escape sequence \033[4m is used to

1. underline character
2. marked them as bold
3. displayed them in reversed video
4. None of the above

Correct Answer : 1

Your Answer :

QuestionID : 11485 Subject Name Linux

Q29. The following command will give output:

command:

at 18:32 tommorow

echo "Happy Birthday"

output:

After 15 minute form the time when the command is executed th screen

will be cleared and a long listing of the current directory would ne dispalyed on

the screen.

ctr d

Correct Answer : T

Your Answer :

QuestionID : 11486 Subject Name Linux

Q30. Only system adminstrator can cancel your printing job

Correct Answer : F

Your Answer :

QuestionID : 11500 Subject Name Linux

Q31. Which of the following is not true as regards the kill command.

1)Superuser can kill daemon processes.

2)For sure kill the signal no is 9.

3)There is no surety that the shell process

will get killed by the command kill < PID of shell process >

4)Using kill command you can kill other user`s processes too.

1. 1,2
2. 2,3
3. 1,4
4. All

Correct Answer : 3

Your Answer :

QuestionID : 11507 Subject Name Linux

Q32. Which of the following is not true.

1)The at command permits you to receive messages only by mail.

2)A person`s login name appears in the file at.allow if he is not allowed use

the at command.

1. 1
2. 2
3. Both are false
4. Both are true.

Correct Answer : 3

Your Answer :

QuestionID : 11511 Subject Name Linux

Q33. The command cat < file1 > file2 will copy the contents of file1

to file2

Correct Answer : T

Your Answer :

QuestionID : 11513 Subject Name Linux

Q34. The shell meta character $# represents

1. total number of arguments supplied to the shell script
2. total number of files in the current directory
3. total number of users who have logged in
4. total number of process running in the background

Correct Answer : 1

Your Answer :

QuestionID : 11516 Subject Name Linux

Q35. The command that Unix offers to a user to find out whether he can send messages to a particular terminal are

1. finger and who

2. finger -mesg and who -T

3. finger -i and who -t

4. finger -i and who -T

Correct Answer : 2

Your Answer :

QuestionID : 11519 Subject Name Linux

Q36. The command wc -l < aaa displays the no of words present in the

file aaa.

Correct Answer : F

Your Answer :

QuestionID : 11535 Subject Name Linux

Q37. Using a tar we can archive files only on magnetic tape

Correct Answer : F

Your Answer :

QuestionID : 11543 Subject Name Linux

Q38. Command to Merge the content of file f1 with the inputs supplied from the keyboard and store the output in a file f2

1. sort -m f1 - > f2

2. sort -m f1 f2

3. merge -m f1 f2

4. none

Correct Answer : 1

Your Answer :

QuestionID : 11549 Subject Name Linux

Q39. Unix commands which accept the input from standard input device and

send the output to the standard output device are called "filters".

Correct Answer : T

Your Answer :

QuestionID : 11559 Subject Name Linux

Q40. k=35

echo `[$k -eq 35] ``[$k-eq 50]`

1. blank line
2. dotted line
3. error
4. none

Correct Answer : 1

Your Answer :

QuestionID : 11570 Subject Name Linux

Q41. Command for search all lines in a file which do not ends with a semicolon

1. grep -v ";" filename
2. grep -v ";$" filename
3. grep ";$" filename
4. grep -x ";$" filename

Correct Answer : 2

Your Answer :

QuestionID : 11573 Subject Name Linux

Q42. x=10

if[x -ge 2] //Is the comparision correct ?

Correct Answer : F

Your Answer :

QuestionID : 11576 Subject Name Linux

Q43. x=3 y=3.5

```
if [$x -eq $y ]
then
 Echo x and y are equal
else
 Echo x and y are not equal
```

1. Echo x and y are equal
2. Echo x and y are not equal
3. error
4. none

Correct Answer : 1

Your Answer :

QuestionID : 11581 Subject Name Linux

Q44. The command ls -l >> f1 would overwrite the contents of f1 with the output of the command ls -l.

Correct Answer : F

Your Answer :

QuestionID : 11584 Subject Name Linux

Q45. the if-then-fi instruction are decision control instruction

Correct Answer : T

Your Answer :

QuestionID : 11594 Subject Name Linux

Q46. which of the following are not unix commnads?

1. md

2. rd
3. both 1 & 2
4. cd

Correct Answer : 3

Your Answer :

QuestionID : 11597 Subject Name Linux

Q47. You have already logged in and some body sends mail to you. In such an event when you whould receive the message `you have mail`?

1. By setting the variable MAILNOTIFY
2. By setting the variable MAILCHECK
3. By setting the variable MAILREAD
4. None

Correct Answer : 2

Your Answer :

QuestionID : 11607 Subject Name Linux

Q48. how will you find out which process have been launched from a specific terminal ?

1. ps -t ttynumber
2. ps
3. ps -t
4. none

Correct Answer : 1

Your Answer :

QuestionID : 11612 Subject Name Linux

Q49. point out error

1. Echo Enter filename

2. read fname

3. if[-rwx $fname]

3. then

4. echo read write and execute permissions

5. fi

1. line 3
2. line 1
3. line 5
4. no error

Correct Answer : 1

Your Answer :

QuestionID : 11613 Subject Name Linux

Q50. In scheduling using "batch" command the system decides the best time for executing our command.Moreover the time at which our command will be executed is not in our control.

Correct Answer : T

Your Answer :

Q1. Functions defined in the current shell are available to all the subshell

invoke from the current shell

Correct Answer : F

Your Answer :

QuestionID : 11325 Subject Name Linux

Q2. OPTIND and OPTARG are unix defined variables.

Correct Answer : T

Your Answer :

QuestionID : 11332 Subject Name Linux

Q3. Setting made using stty in a shell script are effective only during

the execution of the script.The orignal setting are restored the moment

excution of the script is over.

Correct Answer : F

Your Answer :

QuestionID : 11333 Subject Name Linux

Q4. we can trap a signal such that on occurence of that signal a particular

shell script gets executed.

Correct Answer : T

Your Answer :

QuestionID : 11336 Subject Name Linux

Q5. Binary executables required for system administration are usually placed in /etc.

Correct Answer : T

Your Answer :

QuestionID : 11339 Subject Name Linux

Q6. An exported variable cannot be unset

Correct Answer : F

Your Answer :

QuestionID : 11344 Subject Name Linux

Q7. To list hidden as well as normal files in thr current directory the command you would use is--

1. ls - a
2. ls - b
3. ls - l
4. None of above.

Correct Answer : 1

Your Answer :

QuestionID : 11352 Subject Name Linux

Q8. who is a special case of who am i command.

Correct Answer : F

Your Answer :

QuestionID : 11356 Subject Name Linux

Q9. While executing a script the shell acts as a compiler

Correct Answer : F

Your Answer :

QuestionID : 11365 Subject Name Linux

Q10. A PC having its own harddisk and memory continue to use them when it is acting as a terminal for a host machine.

Correct Answer : F

Your Answer :

QuestionID : 11366 Subject Name Linux

Q11. All device related files are present in /dev directory.

Correct Answer : T

Your Answer :

QuestionID : 11373 Subject Name Linux

Q12. A kernel program is usually stored in a file called sh.

Correct Answer : F

Your Answer :

QuestionID : 11375 Subject Name Linux

Q13. Shell program is usually stored in a file called Unix.

Correct Answer : F

Your Answer :

QuestionID : 11383 Subject Name Linux

Q14. What would be the output of the following?

echo Hello

eval echo Hello

eval eval echo Hello

echo${newname+Arora}

1. Hello

Hello

2. Error
3. none of the above
4. Hello

Hello

Hello

Correct Answer : 4

Your Answer :

QuestionID : 11385 Subject Name Linux

Q15. All the utilities, applications, directories and data in Unix are stored as files.

Correct Answer : T

Your Answer :

QuestionID : 11388 Subject Name Linux

Q16. The file that controls the printer is stored in a sub-directory called printer created by system admin.

Correct Answer : F

Your Answer :

QuestionID : 11397 Subject Name Linux

Q17. Read,write,execute permissions to a file created by you can be alter by other user

Correct Answer : F

Your Answer :

QuestionID : 11409 Subject Name Linux

Q18. How would you perform the following operations on the contents of a given file.

insert a> and a space at the start of every line in the file

1. 1,$s/^/>[][]/g
2. 1,$s/>[][]/g
3. 1,$s/^/>[]/g
4. none of the above

Correct Answer : 1

Your Answer :

QuestionID : 11410 Subject Name Linux

Q19. If in a script value of IFS is changed to : after execcution of script

the value of IFS is automatically set back to original value

1. True
2. False
3. Can not say
4. Partly True Partly False

Correct Answer : 4

Your Answer :

QuestionID : 11425 Subject Name Linux

Q20. Purpose of .exrc file is convinient way to customize the vi environment and like all

good things you shold put it to utmost use to improve your efficiency .

Correct Answer : T

Your Answer :

QuestionID : 11432 Subject Name Linux

Q21. What is the output of following program segments?

a=b

b=c d=c

echo $$b

echo $$$d

1. 521b

521c

2. 512b

512c

3. 100b

100c

4. none of the above

Correct Answer : 1

Your Answer :

QuestionID : 11441 Subject Name Linux

Q22. Unix uses serial multitasking to support various programs running in memory

Correct Answer : F

Your Answer :

QuestionID : 11463 Subject Name Linux

Q23. the command used for flip the case from upper to lower or vice versa.....

is ~

Correct Answer : T

Your Answer :

QuestionID : 11466 Subject Name Linux

Q24. echo statements output can be redirected to file

Correct Answer : F

Your Answer :

QuestionID : 11470 Subject Name Linux

Q25. Comments can be spilt over multiple lines if each line is preceded

by #

Correct Answer : T

Your Answer :

QuestionID : 11474 Subject Name Linux

Q26. to delete 5 lines from file & to copy them to buffer x we use "x5dd

Correct Answer : T

Your Answer :

QuestionID : 11479 Subject Name Linux

Q27. The following command going to do?

at 0915am Mar 24

echo "Good Morning"

ctrl d

---

o/p: On march 24 at 9.15 am it will print "good morning" on the screen

Correct Answer : T

Your Answer :

QuestionID : 11484 Subject Name Linux

Q28. If the printer goes out of order the system administrator can ensure that the system refuses to accept new printing job

Correct Answer : T

Your Answer :

QuestionID : 11486 Subject Name Linux

Q29. Only system adminstrator can cancel your printing job

Correct Answer : F

Your Answer :

QuestionID : 11492 Subject Name Linux

Q30. The file /bin/sysadmsh can be executed only by the system admin.

Correct Answer : T

Your Answer :

QuestionID : 11495 Subject Name Linux

Q31. which of the following assignment is illgal

1. a=`ls`
2. b=`ls-l`
3. c=`1972`
4. d=`who|grep aal`

Correct Answer : 3

Your Answer :

QuestionID : 11496 Subject Name Linux

Q32. When fork() is given

1. It creats a child process
2. Allocate slot in process table
3. returns 0 to parent & ID to child
4. All of the above

Correct Answer : 4

Your Answer :

QuestionID : 11506 Subject Name Linux

Q33. For a person to receive messages he should have his terminal set to a parameter which will allow him receive messages.

The command to set this parameter is

1. message -on
2. msg -o
3. mesg -y
4. message -y

Correct Answer : 3

Your Answer :

QuestionID : 11509 Subject Name Linux

Q34. we can change the prompt to What Next while using the more command

Correct Answer : F

Your Answer :

QuestionID : 11513 Subject Name Linux

Q35. The shell meta character $# represents

1. total number of arguments supplied to the shell script
2. total number of files in the current directory
3. total number of users who have logged in
4. total number of process running in the background

Correct Answer : 1

Your Answer :

QuestionID : 11518 Subject Name Linux

Q36. There is no need to make file system on a disk if we are going to use it only to back up files on it.

Correct Answer : T

Your Answer :

QuestionID : 11524 Subject Name Linux

Q37. A file system can be mounted and unmounted by any user.

Correct Answer : F

Your Answer :

QuestionID : 11527 Subject Name Linux

Q38. A floppy can be formated only by system administrator

Correct Answer : F

Your Answer :

QuestionID : 11528 Subject Name Linux

Q39. On executing a statement set -3+1

1. $1 would be -3
2. $1 would be -
3. $1 would be set
4. this command would result into an error

Correct Answer : 4

Your Answer :

QuestionID : 11540 Subject Name Linux

Q40. if there are number of file systems then each one will have its own

block

Correct Answer : T

Your Answer :

QuestionID : 11551 Subject Name Linux

Q41. A tar command is can be used to list all the backed up files present on floppy disk.

Correct Answer : T

Your Answer :

QuestionID : 11556 Subject Name Linux

Q42. Unix commands which accept the input from standard input device

and send the output to the standard output device are known as

filters.

Correct Answer : T

Your Answer :

QuestionID : 11559 Subject Name Linux

Q43. k=35

echo `[$k -eq 35] ``[$k-eq 50]`

1. blank line
2. dotted line
3. error
4. none

Correct Answer : 1

Your Answer :

QuestionID : 11562 Subject Name Linux

Q44. i=4 z=12

[$i=5 -a $z - gt5]

echo $?

1. 1
2. 0
3. none
4. error

Correct Answer : 1

Your Answer :

QuestionID : 11566 Subject Name Linux

Q45. To perform the numeric test we must use -ge instead of >=

Correct Answer : T

Your Answer :

QuestionID : 11572 Subject Name Linux

Q46. cat < file1 > file2

cat > file2 < file1

Both the commands will show the same result.

Correct Answer : T

Your Answer :

QuestionID : 11575 Subject Name Linux

Q47. what are the contents of the file /usr/lib/cron/at.deny ?

1. list of users who are currently logged in "at" the current instant
2. list of users who are not allowed to use the "at" command
3. both the above
4. none of the above

Correct Answer : 2

Your Answer :

QuestionID : 11582 Subject Name Linux

Q48. the if-then-fi instruction are loop control instruction

Correct Answer : F

Your Answer :

QuestionID : 11600 Subject Name Linux

Q49. A file can have links across file system.

Correct Answer : F

Your Answer :

QuestionID : 11611 Subject Name Linux

Q50. The command cut -f 2,8 -d":" file1 would output

1. the fields 2 to 8 from file1 where deliminator between fields is :
2. the fields 2 to 8 from file1 including the deliminator : between fields
3. the columns 2 to 8 from file1 with : between each column
4. none

Correct Answer : 1

Q1. When you login the functions that you have declared automatically get loaded in the memory.

Correct Answer : F

Your Answer :

QuestionID : 11320 Subject Name Linux

Q2. The shell script containing functions should be executed in the current

shell.

Correct Answer : T

Your Answer :

QuestionID : 11321 Subject Name Linux

Q3. Functions get executed faster than the corresponding shell script.

Correct Answer : T

Your Answer :

QuestionID : 11324 Subject Name Linux

Q4. All shell script automatically get executed in the current shell.

Correct Answer : F

Your Answer :

QuestionID : 11325 Subject Name Linux

Q5. OPTIND and OPTARG are unix defined variables.

Correct Answer : T

Your Answer :

QuestionID : 11326 Subject Name Linux

Q6. if a shell script is called from another then the called shell script

should necessarly have a return statement.

Correct Answer : F

Your Answer :

QuestionID : 11331 Subject Name Linux

Q7. All unix command always have single character option.

Correct Answer : T

Your Answer :

QuestionID : 11333 Subject Name Linux

Q8. we can trap a signal such that on occurence of that signal a particular

shell script gets executed.

Correct Answer : T

Your Answer :

QuestionID : 11340 Subject Name Linux

Q9. Hidden files in Unix always begin with a character " . "

Correct Answer : T

Your Answer :

QuestionID : 11345 Subject Name Linux

Q10. What are the modes of operation of vi

1. Command Mode
2. Insert Mode
3. ex command mode
4. all of the above

Correct Answer : 4

Your Answer :

QuestionID : 11348 Subject Name Linux

Q11. Usually size of each block in Unix file system is----

1. 512
2. 1024

3. 2048

4. None of above.

Correct Answer : 2

Your Answer :

QuestionID : 11349 Subject Name Linux

Q12. Which are the editors available under unix

1. vi

2. ed

3. ex

4. all of the above

Correct Answer : 4

Your Answer :

QuestionID : 11366 Subject Name Linux

Q13. All device related files are present in /dev directory.

Correct Answer : T

Your Answer :

QuestionID : 11375 Subject Name Linux

Q14. Shell program is usually stored in a file called Unix.

Correct Answer : F

Your Answer :

QuestionID : 11388 Subject Name Linux

Q15. The file that controls the printer is stored in a sub-directory called printer created by system admin.

Correct Answer : F

Your Answer :

QuestionID : 11390 Subject Name Linux

Q16. point out the errors if any

```
j=1
while [ $j -le 10 ]
do
 echo $j
 j=j+1
done
```

1. j=1
2. while [$j -le 10]
3. echo $j
4. j=j+1

Correct Answer : 4

Your Answer :

QuestionID : 11399 Subject Name Linux

Q17. The command cat test1 test2 >> test3 would concatenate the contents of test1 and test2 and overwrite the contents of test3 with the concatenated contents.

Correct Answer : F

Your Answer :

QuestionID : 11405 Subject Name Linux

Q18. "g/^[[]tab]*$/d" :command use to delete all the blank lines

Correct Answer : T

Your Answer :

QuestionID : 11406 Subject Name Linux

Q19. If every user working on unix set up is to use the printer,then the printer should be attached to

1. the host machine
2. any of the terminal
3. the terminal from wher the first login was made
4. none

Correct Answer : 1

Your Answer :

QuestionID : 11412 Subject Name Linux

Q20. break statement is used to exit from

1. if statement
2. for loop
3. a program
4. none

Correct Answer : 2

Your Answer :

QuestionID : 11414 Subject Name Linux

Q21. Each entry in inode table is of size

1. 64kb
2. 32kb
3. 32bytes
4. 64bytes

Correct Answer : 4

Your Answer :

QuestionID : 11417 Subject Name Linux

Q22. which of the following is the command for the searching a pattern in a file

1. find

2. grep
3. lookup
4. none

Correct Answer : 2

Your Answer :

QuestionID : 11421 Subject Name Linux

Q23. To logout from your terminal you

1. Switch off the terminal
2. Press ctrl -d or type exit
3. press ctrl-Alt-Del
4. do nothing it is the system administrator who would do this for you

Correct Answer : 2

Your Answer :

QuestionID : 11424 Subject Name Linux

Q24. What is the output of following program segments?

```
n="ask me"
echo $n
echo "$n"
echo `$n`
```

1. ask me

```
ask me
$n
```

2. ask me

```
$n
```

ask me

3. ask me

4. $n

Correct Answer : 1

Your Answer :

QuestionID : 11431 Subject Name Linux

Q25. Which commands in vi would you use to perform Block copy

1. :m co p

2. :m,n co p

3. both of above

4. none of these

Correct Answer : 3

Your Answer :

QuestionID : 11450 Subject Name Linux

Q26. vi has only help can be invocked using F1key

Correct Answer : F

Your Answer :

QuestionID : 11454 Subject Name Linux

Q27. variable declare in the shell script can be displayed at the $(doller) promot

using the set command

Correct Answer : F

Your Answer :

QuestionID : 11458 Subject Name Linux

Q28. expr can handle only integers where as bc can handle both integer as well as

floats

Correct Answer : T

Your Answer :

QuestionID : 11462 Subject Name Linux

Q29. Unix kernel acts as an agent between the shell and the hadware

Correct Answer : T

Your Answer :

QuestionID : 11465 Subject Name Linux

Q30. In a typical unix Enviornment there are several kernels and one

shell

Correct Answer : F

Your Answer :

QuestionID : 11468 Subject Name Linux

Q31. banner "aaa\nbbb" will display "aaa" and "bbb" as large characters

split over to lines

Correct Answer : T

Your Answer :

QuestionID : 11471 Subject Name Linux

Q32. A shell variable can not handled negative value

Correct Answer : F

Your Answer :

QuestionID : 11477 Subject Name Linux

Q33. You can yank line from one file and paste them into another file

Correct Answer : F

Your Answer :

QuestionID : 11481 Subject Name Linux

Q34. Once a job is submited for printing using the lp command we have to remain logged in till our file gets printed

Correct Answer : F

Your Answer :

QuestionID : 11488 Subject Name Linux

Q35. We can not see contents of packed or compressed file unless we unpack or uncompress it

Correct Answer : F

Your Answer :

QuestionID : 11490 Subject Name Linux

Q36. The main purpose(s) of an O.S. is

1. convinience for the user
2. optimal use of computing resourse
3. both
4. none

Correct Answer : 3

Your Answer :

QuestionID : 11496 Subject Name Linux

Q37. When fork() is given

1. It creats a child process
2. Allocate slot in process table
3. returns 0 to parent & ID to child
4. All of the above

Correct Answer : 4

Your Answer :

QuestionID : 11501 Subject Name Linux

Q38. The command /etc/init 1 puts the system in multi user mode

Correct Answer : F

Your Answer :

QuestionID : 11511 Subject Name Linux

Q39. The command cat < file1 > file2 will copy the contents of file1 to file2

Correct Answer : T

Your Answer :

QuestionID : 11526 Subject Name Linux

Q40. A single Unix file System can be split over multiple hard Disks

Correct Answer : F

Your Answer :

QuestionID : 11528 Subject Name Linux

Q41. On executing a statement set -3+1

1. $1 would be -3
2. $1 would be -
3. $1 would be set
4. this command would result into an error

Correct Answer : 4

Your Answer :

QuestionID : 11538 Subject Name Linux

Q42. which is following is NOT shell keyword

1. shift
2. readonly
3. unset

4. ls

Correct Answer : 4

Your Answer :

QuestionID : 11541 Subject Name Linux

Q43. A tar command always needs at least one function option.

Correct Answer : T

Your Answer :

QuestionID : 11545 Subject Name Linux

Q44. The number of inodes that can be created on a floppy disk have been fixed according to their capacities.

Correct Answer : F

Your Answer :

QuestionID : 11564 Subject Name Linux

Q45. Which command can be used to find all links with vi editor suupose the

1. $ls -i /bin/vi
2. $find / -inum < inode no > -print
3. Both 1 and 2
4. None of the above

Correct Answer : 3

Your Answer :

QuestionID : 11572 Subject Name Linux

Q46. cat < file1 > file2

cat > file2 < file1

Both the commands will show the same result.

Correct Answer : T

Your Answer :

QuestionID : 11602 Subject Name Linux

Q47. how will you find out which jobs have been submitted for execution in future?

1. using at -l command
2. using at -t command
3. using fut -jobs command
4. none

Correct Answer : 1

Your Answer :

QuestionID : 11605 Subject Name Linux

Q48. Which of the following is not true?

1. sorting is done on the basis of first charecter of each line
2. sort command sorts a file word by word rather than line by line
3. sort command has a provision to do a numeric sort
4. sort is not a filter

Correct Answer : 2

Your Answer :

QuestionID : 11612 Subject Name Linux

Q49. point out error

1. Echo Enter filename

2. read fname

3. if[-rwx $fname]

3. then

4. echo read write and execute permissions

5. fi

1. line 3
2. line 1
3. line 5
4. no error

Correct Answer : 1

Your Answer :

QuestionID : 11613 Subject Name Linux

Q50. In scheduling using "batch" command the system decides the best time for executing our command.Moreover the time at which our command will be executed is not in our control.

Correct Answer : T

Q1. Functions defined in the current shell are available to all the subshell

invoke from the current shell

Correct Answer : F

Your Answer : F

QuestionID : 11323 Subject Name Linux

Q2. OPTIND and OPTARG are unix defined variables.

Correct Answer : T

Your Answer :

QuestionID : 11324 Subject Name Linux

Q3. All shell script automatically get executed in the current shell.

Correct Answer : F

Your Answer :

QuestionID : 11330 Subject Name Linux

Q4. An argument to the option cannot begin with a minu sign.

Correct Answer : F

Your Answer :

QuestionID : 11343 Subject Name Linux

Q5. if output o command is piped to a while loop the loop is executed in

in a sub-shell

Correct Answer : T

Your Answer :

QuestionID : 11348 Subject Name Linux

Q6. Usually size of each block in Unix file system is----

1. 512
2. 1024

3. 2048

4. None of above.

Correct Answer : 2

Your Answer :

QuestionID : 11350 Subject Name Linux

Q7. If output of a while loop is redirected to a file then the loop

is executed in a sub-shell

Correct Answer : T

Your Answer :

QuestionID : 11362 Subject Name Linux

Q8. All devices in Unix are implemented as files.

Correct Answer : T

Your Answer :

QuestionID : 11368 Subject Name Linux

Q9. A terminal file is always a block special file.

Correct Answer : F

Your Answer :

QuestionID : 11390 Subject Name Linux

Q10. point out the errors if any

```
j=1
while [ $j -le 10 ]
do
 echo $j
 j=j+1
```

done

1. j=1
2. while [$j -le 10]
3. echo $j
4. j=j+1

Correct Answer : 4

Your Answer :

QuestionID : 11391 Subject Name Linux

Q11. Everything that is displayed on your terminal is first

written to a file associated with a terminal then displayed

on your terminal

Correct Answer : T

Your Answer :

QuestionID : 11398 Subject Name Linux

Q12. Unix os cannot run on which of the following Microprocessor

1. 8086
2. 80386
3. 80286
4. Pentium

Correct Answer : 1

Your Answer :

QuestionID : 11404 Subject Name Linux

Q13. Command to create 5 empty files empty1,empty2,empty3,empty4,empty5

1. touch empty1,empty2,empty3,empty4,empty5
2. cat empty1,empty2,empty3,empty4,empty5

3. Both

4. None of above

Correct Answer : 1

Your Answer :

QuestionID : 11407 Subject Name Linux

Q14. Size of block in Unix file system is

1. 512 bytes

2. 1024 bytes

3. 2048 bytes

4. Any of above

Correct Answer : 4

Your Answer :

QuestionID : 11413 Subject Name Linux

Q15. Which of the following is a popular terminal emulation software

1. VTERM

2. VT100

3. COMIT

4. Perl

Correct Answer : 1

Your Answer :

QuestionID : 11418 Subject Name Linux

Q16. The state of file system is contained in

1. Boot block

2. A special block created by boot block

3. super block

4. None of above

Correct Answer : 3

Your Answer :

QuestionID : 11421 Subject Name Linux

Q17. To logout from your terminal you

1. Switch off the terminal

2. Press ctrl -d or type exit

3. press ctrl-Alt-Del

4. do nothing it is the system administrator who would do this for you

Correct Answer : 2

Your Answer :

QuestionID : 11422 Subject Name Linux

Q18. The difference between the commands ps -e and ps -a is

1. ps -e gives detail of every process running in memory whereas ps -a gives output for all the process that you have launched.

2. ps -e gives details of every process running in memory whereas ps -a gives details of all user processes.

3. No difference,both give same output.

4. None of the above.

Correct Answer : 2

Your Answer :

QuestionID : 11425 Subject Name Linux

Q19. Purpose of .exrc file is convinient way to customize the vi environment and like all

good things you shold put it to utmost use to improve your efficiency .

Correct Answer : T

Your Answer :

QuestionID : 11429 Subject Name Linux

Q20. In a=1235

a is a numeric shell variable

Correct Answer : F

Your Answer :

QuestionID : 11431 Subject Name Linux

Q21. Which commands in vi would you use to perform Block copy

1. :m co p
2. :m,n co p
3. both of above
4. none of these

Correct Answer : 3

Your Answer :

QuestionID : 11454 Subject Name Linux

Q22. variable declare in the shell script can be displayed at the $(doller) promot

using the set command

Correct Answer : F

Your Answer :

QuestionID : 11458 Subject Name Linux

Q23. expr can handle only integers where as bc can handle both integer as well as

floats

Correct Answer : T

Your Answer :

QuestionID : 11461 Subject Name Linux

Q24. Any Shell script by default get executed in the current shell

Correct Answer : F

Your Answer :

QuestionID : 11470 Subject Name Linux

Q25. Comments can be spilt over multiple lines if each line is preceded

by #

Correct Answer : T

Your Answer :

QuestionID : 11481 Subject Name Linux

Q26. Once a job is submited for printing using the lp command we have to remain logged in till our file gets printed

Correct Answer : F

Your Answer :

QuestionID : 11486 Subject Name Linux

Q27. Only system adminstrator can cancel your printing job

Correct Answer : F

Your Answer :

QuestionID : 11489 Subject Name Linux

Q28. the fol.Signal is sent by DMA controller

1. HREQ
2. HLDA
3. DRQ
4. none

Correct Answer : 2

Your Answer :

QuestionID : 11491 Subject Name Linux

Q29. Change the modification time of a file to mid night of 01/01/1996

1. touch 0101000096 filename
2. touch 01010096 filename
3. touch 0101001996 filename
4. touch 11000096 filename

Correct Answer : 1

Your Answer :

QuestionID : 11502 Subject Name Linux

Q30. A null variable a can be created using

1. a=
2. a=`` ``
3. a=`` ``
4. All of above

Correct Answer : 4

Your Answer :

QuestionID : 11503 Subject Name Linux

Q31. Command to convert all capital letters in file to small case letters

1. dd if=file1 of=file2 conv=lcase
2. dd if=file1 of=file2 conv=smallcase
3. dd if=file1 of=file2 conv=lowercase
4. dd if=file1 of=file2 conv=ucase

Correct Answer : 1

Your Answer :

QuestionID : 11505 Subject Name Linux

Q32. What will be the output:

commnand:

at 6 pm wednesday next week

who

ctrl d

output:

At 6pm on wednesday of current week a list of users who have logged

in at that time would be dispalyed.

Correct Answer : F

Your Answer :

QuestionID : 11511 Subject Name Linux

Q33. The command cat < file1 > file2 will copy the contents of file1

to file2

Correct Answer : T

Your Answer :

QuestionID : 11516 Subject Name Linux

Q34. The command that Unix offers to a user to find out whether he can send messages to a particular terminal are

1. finger and who
2. finger -mesg and who -T
3. finger -i and who -t
4. finger -i and who -T

Correct Answer : 2

Your Answer :

QuestionID : 11517 Subject Name Linux

Q35. when we are executing a shell script the shell acts as

1. an interpreter
2. compiler
3. operating system
4. none

Correct Answer : 1

Your Answer :

QuestionID : 11521 Subject Name Linux

Q36. A file system can be install at any mount point other than /mnt

Correct Answer : T

Your Answer :

QuestionID : 11526 Subject Name Linux

Q37. A single Unix file System can be split over multiple hard Disks

Correct Answer : F

Your Answer :

QuestionID : 11538 Subject Name Linux

Q38. which is following is NOT shell keyword

1. shift
2. readonly
3. unset
4. ls

Correct Answer : 4

Your Answer :

QuestionID : 11539 Subject Name Linux

Q39. It is neccesary to unmount a file system before removing a floppy.

Correct Answer : T

Your Answer :

QuestionID : 11549 Subject Name Linux

Q40. Unix commands which accept the input from standard input device and

send the output to the standard output device are called "filters".

Correct Answer : T

Your Answer :

QuestionID : 11558 Subject Name Linux

Q41. Following command is used delete all 5 bytes files from a current directory downwords

$find . -size 5c -exec rm{}\;

Correct Answer : T

Your Answer :

QuestionID : 11559 Subject Name Linux

Q42. k=35

echo `[$k -eq 35] ``[$k-eq 50]`

1. blank line
2. dotted line
3. error
4. none

Correct Answer : 1

Your Answer :

QuestionID : 11560 Subject Name Linux

Q43. Display all the lines in a file which contain the word "Poem" from a file english.txt.

You should be able to report all occurence like POem,PoEm,POEm etc.You are not allowed to use a command line option to ignore the case while searching.

1. grep [Pp][Oo][Ee][Mm] english.txt

2. grep [p][Oo][Ee][Mm] english.txt
3. grep [Pp][o][Ee][Mm] english.txt
4. grep [Pp][][Ee][Mm] english.txt

Correct Answer : 1

Your Answer :

QuestionID : 11582 Subject Name Linux

Q44. the if-then-fi instruction are loop control instruction

Correct Answer : F

Your Answer :

QuestionID : 11591 Subject Name Linux

Q45. Dameon processes cannot be killed using the KILL command

Correct Answer : T

Your Answer :

QuestionID : 11592 Subject Name Linux

Q46. The output of the command banner "Unix Shell Programming" would be

1. A banner showing `unix`,`shell` and `programming` words display in separate lines
2. A banner showing `unix shell` in one single line
3. none
4. A banner showing `unix shell programming` in one single line

Correct Answer : 2

Your Answer :

QuestionID : 11597 Subject Name Linux

Q47. You have already logged in and some body sends mail to you. In such an

event when you whould receive the message `you have mail`?

1. By setting the variable MAILNOTIFY

2. By setting the variable MAILCHECK

3. By setting the variable MAILREAD

4. None

Correct Answer : 2

Your Answer :

QuestionID : 11599 Subject Name Linux

Q48. the priority of a particular process can be decreased by increasing the "nice value" of the command when it is launched.

Correct Answer : T

Your Answer :

QuestionID : 11601 Subject Name Linux

Q49. To ascertain what are the contents of files in your system the best way would be

1. Do a cat coomand on each file and find the content

2. Use the command cat *

3. Use the command file *

4. none

Correct Answer : 3

Your Answer :

QuestionID : 11621 Subject Name Linux

Q50. The daemon process can be killed using using the kill command

Correct Answer : F

Your Answer :

1. Identify the incorrect stateAnswers #-->Is a answer
1. javac helps in compiling the java program and creates the .class files
2. java runs the programs using the bytecode in .class files
#3. java runs the programs using the source code in .java files
4. javac is in the JDK package and java is in the JRE packagement about compilation and execution of java programs

2. What command is used to save the standard output in a file, as well as display it on the terminal?
Answers
#1. tee
2. grep
3. cat
4. more

3. Which command is used to change the I/O characteristics of the terminal?
Answers
1. Ctty
2. Ptty
#3. Stty
4. Tty

4. Which Linux command list the content of all sub directory?
Answers
1. ls ~
#2. ls * /
3. ls /
4. ls ../

5. What will be the output of the following Java code?

```
class array_output
{
    public static void main(String args[])
    {
      int array_variable[][] = {{ 1, 2, 3}, { 4 , 5, 6}, { 7, 8, 9}};
        int sum = 0;
        for (int i = 0; i < 3; ++i)
            for (int j = 0; j <  3 ; ++j)
                sum = sum + array_variable[i][j];
          System.out.print(sum / 5);
    }
}
```

Answers

1. 8
#2. 9
3. 10
4. 11

6. How many constructors in the String class?
Answers
1. 1
2. 2
#3. 13
4. 11

7. What will be the output of below statements?

String s = "Java String Quiz"; System.out.println(s.charAt(s.toUpperCase().length()));
Answers
1. Convert “Z” to int 90 and prints “90”
#2. Runtime Exception
3. Prints “z”
4. Prints “Z”

8. What will be the output of the following class?

```
class C
 {
 public static void main(String[] args)
 {
 String s1 = "Hello";
 String s2="India";
 String s3=s1+s2;
 String s4=s1.concat(s2);
 System.out.println(s3==s4);
 System.out.println(s3.equals(s4));
}
}
```

Answers
1. true, true
2. true, false
#3. false, true
4. false, false

9. Which component is responsible for optimizing byte-codes?
Answers
1. JVM

2. JDK
#3. JIT
4. JRE

10. Which of these cannot be declared static?
Answers
1. class
#2. object
3. variable
4. method

11. Which of the following statements are incorrect?
Answers
1. static methods can call other static methods only
2. static methods must only access static data
3. static methods can not refer to this or super in any way
#4. when object of class is declared, each object contains its own copy of static variables

12. What will be the output of the following Java program?

```
class access
{
    public int x;
     static int y;
    void cal(int a, int b)
    {
        x +=  a ;
        y +=  b;
    }
}
class static_specifier
{
    public static void main(String args[])
    {
        access obj1 = new access();
        access obj2 = new access();
        obj1.x = 0;
        obj1.y = 0;
        obj1.cal(1, 2);
        obj2.x = 0;
        obj2.cal(2, 3);
        System.out.println(obj1.x + " " + obj2.y);
    }
}
```

Answers
1. 1 2
2. 2 3
3. 3 2
#4. 1 5

13. When invoking a method with an object argument, _____ is passed.
Answers
1. Athe contents of the object
2. a copy of the object
#3. the reference of the object
4. the object is copied, then the reference of the copied object

14. Choose the correct answer.
Answers
1. Recursion is always better than iteration.
#2. Recursion uses more memory compared to iteration.
3. Recursion uses less memory compared to iteration.
4. Iterative function is always better and simpler to write than recursion.

15. What will be the output of the following program?

```
class RecursiveFor
{
    public static void main(String[] args)
    {
        int out = 15;
        for (int i = 4; i < 6; i++)
        {
            for (int j = 7; j >= 5; j--)
            {
                if (i == j) continue;
                if (i > j)
                {
                    out += main(i, j);
                }
                else
                {
                    out += main(j, i);
                }
            }
        }
        System.out.println("out = " + out);
    }
```

```
    private static int main(int a, int b)
    {
        if (a + b == 0)
        {
            return 2;
        }
        return a + main(a - 1, b);
    }
}
```

Answers
1. out = 78
#2. out = 100
3. out = 80
4. Compilation Error

16. What is the right output of this program ?

```
public class BitwiseNotOperator{
   public static void main(String[] args)
    {

      int i = 50;
      System.out.print(~i);
      System.out.print(",");
      System.out.print(~--i);
      System.out.print(",");
      System.out.print(~++i);
   }
}
```

Answers
1. -50,-49,-50
2. -51,-51,-52
3. -49,-50,-51
#4. -51,-50,-51

17. The operating system and the other processes are protected from being modified by an already running process because _____
Answers
1. They are in different memory spaces
2. They are in different logical addresses

3. They have a protection algorithm
#4. Every address generated by the CPU is being checked against the relocation and limit registers

18. Where are placed the list of processes that are prepared to be executed and waiting?
Answers
1. Job queue
#2. Ready queue
3. Execution queue
4. Process queue

19. By shell into the parameter, __ reads the first argument
Answers
#1. $1
2. $3
3. $$
4. 1$

20. The program is interrupted by_____ command in appropriate way.
Answers
1. kill
2. SIGKILL
#3. trap
4. INT

21. Which system call can be used by a parent process to determine the termination of child process?
Answers
#1. wait()
2. exit()
3. fork()
4. get()

22. The entry of all the PCBs of the current processes is in _____
Answers
1. Process Register
2. Program Counter
#3. Process Table
4. Process Unit

23. If one thread opens a file with read privileges then:
Answers
1. other threads in the another process can also read from that file

#2. other threads in the same process can also read from that file
3. any other thread can not read from that file
4. all of the mentioned

24. A computer system supports 32-bit virtual addresses as well as 32-bit physical addresses. Since the virtual address space is of the same size as the physical address space, the operating system designers decide to get rid of the virtual memory entirely. Which one of the following is true?
Answers
1. Efficient implementation of multi-user support is no longer possible
2. The processor cache organization can be made more efficient now
#3. Hardware support for memory management is no longer needed
4. CPU scheduling can be made more efficient now

25. In Process Address Space, The variable names, constants, and instruction labels are the basic elements of _____.
Answers
#1. Symbolic addresses
2. Relative addresses
3. Physical addresses
4. None of the above

26. In which type of Fragmentation, Memory block assigned to process is bigger. Some portion of memory is left unused, as it cannot be used by another process.
Answers
1. External fragmentation
#2. Internal fragmentation
3. Both of the above
4. None of the above

27. A swapper manipulates _____ whereas the pager is concerned with individual _____ of a process.
Answers
1. the entire process, parts
2. all the pages of a process, segments
#3. the entire process, pages
4. none of the mentioned

28. Segment replacement algorithms are more complex than page replacement algorithms because _____
Answers
1. Segments are better than pages
2. Pages are better than segments

#3. Segments have variable sizes
4. Segments have fixed sizes

29. Command used to check shared memory is
Answers
1. ipcs
#2. ipcs -mS
3. ipcs -s
4. ipcs -q

30. One process requires M resource to complete a job. What should be the minimum number of resources available for N processes so that at least one process can continue to execute without blocking/waiting?
Answers
1. M * N
2. M * N – 1
3. M * N + 1
#4. M

31. Which of the following are the major disadvantages of requesting all resources while preventing deadlock?
i) delay process initiation
ii) future resources requirements must be known
iii) subject to cyclic restart
Answers
#1. i and ii only
2. ii and iii only
3. i and iii only
4. i, ii and iii

32. Which of the following are the thread synchronization primitives supported by Solaris
i) Mutual exclusion
ii) Semaphores
iii) Signals
iv) Condition variables
Answers
1. i, ii and iii only
2. ii, iii and iv only
#3. i, ii and iv only
4. All i, ii, iii and iv

33. In which of the following Algorithm where the reference bit is used to determine whether a page has been recently referenced, and some page that has not been recently referenced is

replaced?
Answers
1. LRU Page replacement Algorithm
2. FIFO page replacement Algorithm
3. Optimal page replacement algorithm
#4. NRU Page replacement algorithm

34. In which of the following Page replacement Policy, at every page fault the page replacement policy replaces the page that was loaded into memory earlier than any other page of the process?
Answers
1. LRU Page replacement Algorithm
#2. FIFO page replacement Algorithm
3. Optimal page replacement algorithm
4. NRU Page replacement algorithm

35. In UNIX, the set of masked signals can be set or cleared using the _____ function.
Answers
#1. sigprocmask
2. sigmask
3. sigmaskproc
4. sigproc

36. In most cases, if a process is sent a signal while it is executing a system call :
Answers
1. the system call will continue execution and the signal will be ignored completely
2. the system call is interrupted by the signal, and the signal handler comes in
#3. the signal has no effect until the system call completes
4. none of the mentioned

37. Both processes (the parent and the child) continue execution at the instruction after the fork(), with one difference: the return code for the fork() is _____ for the new (child) process, whereas the _____ process identifier of the child is returned to the parent.
Answers
1. Negative integer, Zero
2. Zero, Negative integer
3. Nonzero integer, Zero
#4. Zero, nonzero integer

38. When the operating system has performed a_____ operation, it has two choices for selecting a process either admitting a newly created process or bring in a previously suspended process.
Answers

1. Swapping-in
#2. Swapping-out
3. Blocked-in
4. Blocked-out

39. There are the following statements that are given below, which of them are correct about Regular expressions in the Linux operating system?
A. The regular expressions are strings that are used for pattern matching in some Linux commands.
#B. The regular expressions are also known as a regex.
C. The regular expressions use some characters that each has a different meaning.
D. Regular expressions can only be used in the Linux commands.
Answers
1. A and B
2. C and D
#3. A, B, and C
4. A, B, C, and D

40. Which of the following command is used to display only directories that exist in the current directory?
Answers
#1. ls –l | grep "^d"
2. ls | grep "^d"
3. ls –l | grep "#d"
4. ls –l | grep "*d"

Assign 2 : Linux Commands

Please find the commands for the following. (Find appropriate command line options for the commands and write commands solutions into your notebook)

No.	Commands	To Do
1.	ls	Display hidden files
2.	rename	Rename all *.txt files to *.htm
3.	ln -s	Create symbolic link (shortcut) for a file
4.	ln	Create hard link for a file
5.	stat	Display time stamp of the file
6.	touch	Change the time stamp of the file
7.	touch	Create empty file
8.	tail	Print all lines in a file from fifth line onwards
9.	init 0, poweroff	Shutdown (Only for super-user)
10.	init 6, reboot	Reboot (Only for super-user)
11.	startx	Start GUI mode (Only for super-user)
12.	whoami	Find current user
13.	tty	Find current terminal
14.	who am i	Find current user and terminal
15.	users	Find all users logged into the system
16.	who	Find all users logged in and terminals in use
17.	grep, egrep, fgrep	Find a given word/pattern from the file
18.	chmod	Make a file as read-only
19.	chmod	Make a file as write, read and execute
20.	wc (using redirection)	Take input from the file, count words and store output to other file
21.	who | wc (using pipe)	Count words in output of “who” command
22.	head, tail (using pipe)	Print lines 5 to 10 from the given file
23.	sort , uniq (using pipe)	Print the uniq values from the unsorted file
24.	who, grep (using pipe)	Display all users not using tty2, tty3, tty4
25.	ls	Display all files in ascending order of their file size
26.	ls, grep (using pipe)	Count number of files owned by a user
27.	ls, grep (using pipe)	Display only hidden files in a directory
28.		Copy line 5 to 8 on VI editor

Assign 1 : Basic Linux Commands

Please find the commands for the following. (Find appropriate command line options for the commands and write commands solutions into your notebook)

No.	Commands	To Do
1.	man	Command to get help about commands
2.	cal	Print calendar for current year
3.	date	Find today's date
4.	hostname	Print IP address and hostname of the machine
5.	pwd	Print current directory
6.	uname	Print System information
7.	mkdir	Create directory
8.	cd	Change current directory
9.	ls, dir	See directory structure
10.	Ls	Print directory content sorted according to time.
11.	cat	Create file
12.	wc	Count the words, characters and lines in a file
13.	cat >>	Append some text into existing file
14.	rm, rmdir	Remove a file, remove a directory
15.	cp	Copy a file, Copy a directory
16.	mv	Move the files
17.	mv	Rename a file
18.	head	Print the specified number of lines from top in the file.
19.	tail	Print the specified number of lines from bottom in the file.
20.	uniq	Avoid repetition in a file.
21.	factor	Find the factors of a number
22.	tac, rev	Print the file in reverse order, Reverse each line in the file
23.	sort	Sort file.
24.	alias	Create command shortcut
25.	unalias	Create shortcut for a command
26.	env	Print environment variables
27.	echo	Print environment variables individually
28.	ps	Print current processes
29.	kill	Kill the process

DAC_KDAC_FEB-2020: Linux Commands

Lab Work: 01

Shell is an application program which provides CUI/CLI in Linux System through which user can interacts with system by means of entering commands in a text format.

+ Command name: "pwd" - print/present working directory
- this command displays absolute path (full path) of the present working directory
- pwd comamand internally refers the value of shell variable by the name "PWD".

+ Command name: "mkdir" – create directory/directories
- create a new directory in a home directory named as -- "os/linux_commands"

$mkdir -p os/linux_commands

+ Command name: "cd" – change directory – for navigation throughout filesystem.

$cd dirpath	**:** change dir to dirpath
$cd ~	: change dir to the home dir
$cd /	: change dir to root (/) dir
$cd -	: change dir to previosly accessed dir
$cd .	: change dir to current dir (.) single dot
$cd ..	: change dir to parent dir (..) two dots

+ Command name: "ls" – lists directory contents

$ls	**:** bydefault displays contents of current dir columnwise in a alphabatically sorted manner.
$ls dirpath	: displays contents of dirpath, whereas dirpath is any absolute path or relative path.
$ls -l	: displays dir contents listwise
$ls -1	: display dir contents one entry per line
$ls -a	: display all contents of the dir (including hidden files)
$ls -A	: display almost all contents of the dir (excluding . & ..)
$ls -i -1	: display inode numbers of each file
$ls -s	: display no. of data blocks allocated for each file in a dir

options/flags/arguments can be used with ls command or information about any other command can be checked with the help of man command.

Command name: "man"
- "man" command is a system manual pager i.e. online help of linux system which is used to display information about commands/library functions/system calls etc..

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For example:

$man ls	:	to display information about "ls" command - bydefualt it displays information user commands from section-1 of manual pages.
$man 1 mkdir	:	to display information about "mkdir" command
$man 2 _exit	:	to display information about _exit() system call
$man 3 printf	:	to display information about printf() library functions

- to man command we can pass first arg as a **section number** of a manual pages
1: to display information about user/system commands binaries
2: to display information about system calls
3: to display information about library functions

- explore man command with the following command
$man man

- Comamnd name: "touch" - change the file timestamps
- $touch india.txt --> timestamps of a file "india.txt" gets changes if it is exists, if it file does not exists, then new file named as "india.txt" gets created having size 0.

- Command name: "cp" - copy files and directories
- Command name: "mv" - move file/files from one location to another location
$mv <filepath> <dest_dir_path>
- also can be used to rename the file if filepath is exists in a dest_dir_path itself.

Exercise:
- open terminal (shell):
press - cntl+alt+t

- enter pwd command to display current working dir/present working directory
$pwd

- create a new dir in a home directory
$mkdir os

- change directory to os
$cd os

- create a new directory in a os directory by the name linux_commands
$mkdir linux_commands

- change directory to linux_commands

SunBeam

$cd linux_commands

- create dir's by the name one, two and three in a current dir
 $mkdir one two three

- check dir's got created or not, give ls command with following options
 $ls
 $ls -l
 $ls -s
 $ls -a

- goto the dir one
 $cd one

- goto to the previously accessed directory
 $cd -

- make sure you are in a **linux_commands** dir by using cd command, create a new dir by the name **four**, inside dir four create sub dir **five**, inside dir five create sub dir **six** with only one mkdir command.
$mkdir -p four/five/six

- check dir four and sub dir’s inside it got created or not by using command
$ls -R : display contents of dir and its sub dir’s recursively

- goto the dir one
$cd one

- create a new file by the name "file1.txt" and enter your name personal information into it:
 $cat > file1.txt
 sachin pawar
 sunbeam karad
sunbeam pune

- press (cntrl+d) to stop writing the contents into the file (i.e. to enter end of file character into the file.

- to display contents of the file
 $cat file1.txt

- to display contents of the file in a reverse order
 $tac file1.txt

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- to append data into the file "file.txt"
 $cat >> file1.txt
 algorithms and data structures
 operating system concepts and linux programming
 (cntrl+d)

- create two more files "file2.txt" and "file3.txt" by using cat command in the same dir **one**

file2.txt contents are:
c programming language
java programming lanaguage
c++ programming language
advanced web programming

file3.txt contents are:
android programming
iphone programming
mobile computing technologies

- enter the following commands and observe the output:
 $cat file1.txt file2.txt file3.txt : cat command is used to concatenate contents of the file/s and display on the terminal.

- Command name: "rmdir" - this command is used to remove empty directory only.

$rmdir <dirpath>	:	to remove empty directory only
$rm -r <dirpath>	:	to remove the contents of the dir recursively and remove dir

- delete all the directories and its sub directories contents:
- goto to the directory linux_commands from current dir by using relative path or absolute path as:
$cd /home/sunbeam/os/linux_commands
$rm -r . - delete all the contents of current dir recursively.

Exercise:
- create a dir by the name **one** in a cur dir and change dir to one
$mkdir one
$ cd one

- create 3 text files inside dir one
$touch 1.txt 11.txt 111.txt

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- create dir by the name **two** inside one and go inside it
$mkdir two
$cd two

- create 3 text files inside dir two
$touch 2.txt 22.txt 222.txt

- create dir by the name **three** inside two and go inside it
$mkdir three
$cd three

- create 3 text files inside dir three
$touch 3.txt 33.txt 333.txt
- create dir by the name **four** inside three and go inside it
$mkdir four
$cd four

- create 3 text files inside dir four
$touch 4.txt 44.txt 444.txt

- create dir by the name **five** inside four and go inside it
$mkdir five
$cd five

- create 3 text files inside dir five
$touch 5.txt 55.txt 555.txt

- goto home directory:
$cd ~ OR $cd /home/sunbeam

After creating above directory structure do following operations:
1. list directory contents of the dir five from cur directory (i.e. from home dir)
2. write your name in a file named **444.txt** of dir **four** from current dir.
3. remove the file named 555.txt from current directory.
4. change directory to **five,** use relative path to go dir five
5. write your course name in file named **333.txt** which resides in dir **three** from cur directory (i.e. from five).
6. list the contents of dir two from the cur directory (i.e. from five)
7. remove file named **222.txt** which belongs to dir two from cur dir.
8. change directory to **one**
9. remove all the files only from dir named **five** from current directory (i.e. from one).
10. remove directory named **five** from the current directory (i.e. from one).
11. remove whole directory **four** from current directory (i.e. from one).

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12. change directory to home directory
13. change the time stamps of the file named **333.txt** which resides in a directory by the name **three** from the current directory.
14. add contents into the file 11.txt by using cat command, and display again from current directory (i.e. from home directory).
15. append contenst inside the same file again from the same location.
16. goto dir **one**, create a file by the name **.india.txt** and append data into it.
After creating file give **$ls** command & **$ls -a** command and check the difference.

Command name: cal

$cal : displays calender of current month
$cal <year> : displays calender of year mentioned
$cal <month> <year> : displays calender of month of year
$cal -3 : display previous, current & next month calender
$cal -1 : displays calender of current month only.

Command name: date

$date : displays current date
$date +"%d/%m/%Y"
$date +"%d/%m/%y"

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 # Polling Quiz MCQs

1. Which of the following is not a filesystem of Windows?
Option 1: FAT
Option 2: NTFS
Option 3: exFAT
Option 4: HFS
Correct Option: 4

2. _____ is an unique identifier of each file in a filesystem.
Option 1: File Name
Option 2: File Address
Option 3: iNode Number
Option 4: File ID
Correct Option: 3

3. Which of the following block of file system contains information about file system i.e. metadata.
Option 1: Master File Table
Option 2: Data Block
Option 3: Boot Block
Option 4: Volume Control Block
Correct Option: 4

4. Information about the file can be kept inside one structure called as _____.
Option 1: File Table
Option 2: File Control Block
Option 3: FileSystem Table
Option 4: All of the above
Correct Option: 2

5. In which of the following page replacement algorithm page will not get used in near future will be replaced by requested page?
Option 1: LRU Page Replacement Algorithm
Option 2: FIFO Page Replacement Algorithm
Option 3: Optimal Page Replacement Algorithm
Option 4: MFU Page Replacement Algorithm
Option 5: None of the above
Correct Option: 3

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 # Polling Quiz MCQs:

1. Memory remains unused which is internal to the partition then it is referred as _____.
Option 1: an external fragmentation
Option 2: an internal fragmentation
Option 3: both options A & B
Option 4: none of the above
Correct Option: 2

2. To swap out processes from the main memory into swap area and to swap in processes from swap area into the main memory is done by _____.
Option 1: MMU
Option 2: Memory Manager
Option 3: Swapper
Option 4: None of the above
Correct Option: 2

3. In _____ memory management scheme there is no external fragmentation.
Option 1: variable size partitioning
Option 2: fixed size partitioning
Option 3: segmentation
Option 4: paging
Correct Option: 4

4. Which of the following memory allocation method is faster?
Option 1: best fit
Option 2: first fit
Option 3: worst fit
Option 4: none of the above
Correct Option: 2

5. To keep track on all the pages of same process an OS maintains one table per process called as _____.
Option 1: paging table
Option 2: page table
Option 3: page-frame table
Option 4: frame table
Correct Option: 2

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 # Polling Quiz MCQs:

1. Processes which shares data with another processes referred as
Option 1: related processes
Option 2: co-operative processes
Option 3: independent processes
Option 4: all of the above
Option 5: none of the above
Correct Option: 2

2. Banker's algorithm is used for _____.
Option 1: deadlock prevention
Option 2: deadlock recovery
Option 3: deadlock detection & avoidance
Option 4: all of the above
Option 5: none of the above
Correct Option: 3

3. MMU is a _____ that converts logical address into the physical address.
Option 1: system program
Option 2: application program
Option 3: firmware
Option 4: hardware unit
Option 5: none of the above
Correct Option: 4

4. what is/are necessary and sufficient condition/s to occur deadlock.
Option 1: resource can be allocated for any one process at a time
Option 2: control of any resource cannot be taken away forcefully from a process
Option 3: each process is holding one resource and requesting for a resource which is held by another process.
Option 4: circular wait
Option 5: all of the above
Correct Option: 5

5. To recover system from deadlock, process which gets terminated is referred as a
Option 1: terminated process
Option 2: target process
Option 3: victim process
Option 4: all of the above
Correct Option: 3

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Polling Quiz MCQs:

1. If at a time resource can be acquired by more than one processes then which of following synchronization tool is used for synchronization?
Option 1: Binary Semaphore
Option 2: Mutex Object
Option 3: Classic Semaphore
Option 4: All of the above
Option 5: None of the above
Correct Option: 3

2. Which of the following statement is true in an IPC?
Option 1: under shared memory model processes can communicates directly with each other.
Option 2: any process can sends signal to an OS.
Option 3: by using pipe() system call processes can send as well as receive message.
Option 4: by using pipe command only related processes can communicates.
Correct Option: 4

3. Critical Section Problem can be resolved by using (Single Choice)
Option 1: Binary Semaphore
Option 2: Mutex Object
Option 3: Classic Semaphore
Option 4: Both Options 1 & 2
Option 5: None of the above
Correct Option: 4

4. Which of the following signal an OS send to a process for forceful termination?
Option 1: SIGTERM
Option 2: SIGEND
Option 3: SIGSTOP
Option 4: SIGKILL
Correct Option: 4

5. Which of the following ipc mechanism is used for communication across the systems?
Option 1: pipe
Option 2: message queue
Option 3: chatting application
Option 4: socket
Option 5: shared memory model
Correct Option: 4

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 # Polling Questions

1. In which of the following case preemptive cpu scheduling takes place? Option 1: running -> terminated
Option 2: running -> waiting
Option 3: waiting -> ready
Option 4: all of the above
Option 5: none of the above
Correct Option: 3

2. Which of the following is not a CPU scheduling criteria?
Option 1: Waiting Time
Option 2: Response Time
Option 3: CPU Burst Time
Option 4: Turn-Around-Time
Correct Option: 3

3. Which of the following statement is not true about scheduling criterias?
Option 1: CPU utilization must be as max as possible
Option 2: Waiting Time must be as max as possible
Option 3: Turn-Around-Time must be as min as possible
Option 4: Response Time must be as min as possible
Correct Option: 2

4. Which of the following CPU scheduling algorithm is non-preemptive?
Option 1: SJF
Option 2: FCFS
Option 3: Priority
Option 4: All of the above
Option 5: None of the above
Correct Option: 2

5. Convoy effect occurs in _____ cpu scheduling algorithm.
Option 1: priority
Option 2: shortest remaining time first
Option 3: shortest next time first
Option 4: none of the above
Correct Option: 4

6. Which of the following CPU scheduling algorithm ensures minimum waiting time?
Option 1: FCFS
Option 2: SJF
Option 3: Priority
Option 4: Round Robin
Correct Option: 2

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 # Polling Quiz MCQs

1. In which of the following case preemptive cpu scheduling takes place? Option 1: running -> terminated
Option 2: running -> waiting
Option 3: waiting -> ready
Option 4: All of the above
Option 5: None of the above
Correct Option: 3

2. _____ copies an execution context of a process which is scheduled by the scheduler from its PCB and restores it onto the CPU registers.
Option 1: Loader
Option 2: Interrupt Handler
Option 3: Dispatcher
Option 4: Job Scheduler
Correct Option: 3

3. Which of the following is a kernel data structure?
Option 1: PCB
Option 2: Ready Queue
Option 3: Job Queue
Option 4: All of the above
Option 5: None of the above
Correct Option: 4

4. Which of the following statement is false about a thread?
Option 1: thread is the smallest execution unit of a process.
Option 2: thread is the smallest indivisible part of a process.
Option 3: thread is a lightweight process.
Option 4: the CPU can execute more than one threads at a time
Correct Option: 4

5. System in which the CPU time gets shared among all running programs is referred as a _____.
Option 1: multi-programming system
Option 2: multi-tasking system
Option 3: time sharing system
Option 4: both options 2 & 3
Option 5: both options 1 & 3
Option 6: none of the above
Correct Option: 4

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 # Polling Quiz MCQs:

1. System calls are nothing but
Option 1: Kernel program functions
Option 2: Software Interrupts
Option 3: Interface provided to call services made available by the Kernel
Option 4: All of the above
Option 5: None of the above
Correct Option: 4

2. Which of the following is not a job of Process Control Subsystem?
Option 1: Inter Process Communication
Option 2: Scheduling
Option 3: Memory Management
Option 4: Device Management
Correct Option: 4

3. Which of the following system call is used to create a new process in UNIX?
Option 1: CreateProcess()
Option 2: clone()
Option 3: fork()
Option 4: None of the above
Correct Option: 3

4. Which of the following section is not a part of process?
Option 1: bss section
Option 2: rodata section
Option 3: code section
Option 4: symbol table
Correct Option: 4

5. In user mode, value of mode bit is ____.
Option 1: 0
Option 2: 1
Option 3: -1
Option 4: None of the above
Correct Option: 2

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Polling Quiz MCQs

1. What is the file format of an executable file in Linux Operating System? Option 1: ELF
Option 2: EFL
Option 3: PE
Option 4: None of the above
Correct Option: Option 1

2. Which of the following section contains magic number in an executable file? Option 1: bss section
Option 2: code section
Option 3: primary header
Option 4: symbol table
Correct Option: Option 3

3. Which of the following statement/s is/are false about a process?
Option 1: Process is a running entity of a program
Option 2: Program in main memory is referred as a process
Option 3: One program may has multiple running instances i.e. processes.
Option 4: Program in execution is referred as a process.
Option 5: All of the above
Option 6: None of the above
Correct Option: Option 3

4. Which of the following is a Linux Kernel?
Option 1: vmlinux
Option 2: vmlinuz
Option 3: vimlinuz
Option 4: all of the above
Option 5: none of the above
Correct Option: Option 2

5. During Machine Boot, process to check peripherals connectivity is called as
Option 1: BIOS
Option 2: POST
Option 3: Authentication
Option 4: None of the above
Correct Option: Option 2

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Polling Questions : MCQs

1. Which of the following is a system program?

   Option 1: compiler

   Option 2: linker

   Option 3: loader

   Option 4: assembler

   Option 5: all of the above

   Option 6: none of the above

   Answer: 3

2. _____ converts high level programming language code into a low level programming language code.

   Option 1: An assembler

   Option 2: Compiler

   Option 3: Preprocessor

   Option 4: Linker

   Answer: 2

3. Output of the linker is _____ .

   Option 1: an object code

   Option 2: an executable code

   Option 3: an intermediate code

   Option 4: an assembly language code

   Answer: 2

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4. Which of the following program provides graphical user interface in Windows Operating System?

Option 1: cmd.exe

Option 2: explorer.exe

Option 3: command.com

Option 4: all of the above

Option 5: none of the above

Answer: 2

5. Which of the following program is a system program?

Option 1: Interrupt Handler

Option 2: Device Driver

Option 3: Loader

Option 4: All of the above

Option 5: None of the above

Answer: 4

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USM's Shriram Mantri Vidyanidhi Info Tech Academy

Operating System Question Bank eDAC May 21

1) DDE feature is supported by

a. IPC b. Hard Real Time System c. Microkernel d. None

2) A program that acts as an interface between process and OS is called

a. Kernel **b. System call** c. Microkernel d. Virtual Machine

3) The time sharing operating system is also called as

a. Multiprogramming **b. Multitasking** c. Both d. None

4) IPC is required in

a. Multiprocessing b. Single processing c. Both d. None

5) DDE stands for

a. Distributed Dynamic Exchange b. Dynamic Distributed Exchange

c. Distributed Data Exchange **d. Dynamic Data Exchange**

6) A PCB is created when a process is

a. Running b. Ready **c. Created** d. None

7) ISR stands for

a. Inter Service Routine **b. Interrupt Service Routine**

c. Interrupt Set Routin d. Internal Service Routing

8) Inter process communication can be done through

a. Mails **b. Messages** c. System calls d. Traps

9) 9The operating system of a computer serves as a software interface between the user and the

a. Hardware b. Peripheral c. Memory **d. Screen**

10) A thread is a _____ process.

a. Heavy Weight b. Multiprocess c. Inter Thread **d. Light weight**

11) 1 A process said to be in _____ state if it was waiting for an event that will never occur.

a. Safe b. Unsafe **c. Deadlock** d. All

12) The Hardware mechanism that enables a device to notify the CPU is called _____.

a. Polling **b. Interrupt** c. System Call d. None of the above

13) IPC stands for

a. Inner Process Communication b. Inter Process Call

c. Inter Process Communication d. Intra Process Call

14) For non sharable resources like a printer, mutual exclusion :
a. **must exist** b. must not exist c. may exist d. None of these

15) The request and release of resources are _____.
a. command line statements b. interrupts **c. system calls** d. special programs

16) A machine that acts as a virtual computer is called
a. **Virtual Machine** b. Virtual Environment c. Both d. None

17) Semaphores are used to solve the problem of
a. race condition b. process synchronization **c. mutual exclusion** d. belady problem

18) In which scheduling policies, context switching never takes place
a. **FCFS** b. round robin c. Shortest job first d. Pre-empitive

19) Which technique was introduced because a single job could not keep both the CPU and the I/O devices busy?
a. Time-sharing b. Spooling c. Preemptive scheduling **d. Multiprogramming**

20) Which of the following memory allocation scheme suffers from External fragmentation? a. **Segmentation** b. Pure demand paging c. Swapping d. Paging

21) A major problem with priority scheduling is _____.
a. Definite blocking **b. Starvation** c. Low priority d. None of the above

22) A state is safe if
a. It removes deadlock b. It detects deadlock c. It avoids deadlock **d. None**

23) Banker's Algorithm is implemented to
a. Detect Deadlock b. Prevent Deadlock **c. Avoid Deadlock** d. All

24) The disadvantage of moving all process to one end of memory and all holes to the other direction, producing one large hole of available memory is :
a. **the cost incurred** b. the memory used c. the CPU used d. All of these

25) Semaphore is a/an _____ to solve the critical section problem.
a. hardware for a system b. special program for a system
c. integer variable d. None of these

26) Virtual memory is normally implemented by _____.
a. **demand paging** b. buses c. virtualization d. All of these

27) When a thread needs to wait for an event it will

a. Block b. Execute c. Terminate d. Update

28) Paging increases the _____ time.
a. waiting b. execution **c. context – switch** d. All of these

29) Smaller page tables are implemented as a set of _____.
a. queues b. stacks c. counters d. **registers**

30) _____ is generally faster than _____ and _____.
a. **first fit, best fit, worst fit** b. best fit, first fit, worst fit
c. worst fit, best fit, first fit d. None of these

31) The two steps of a process execution are : (choose two)
a. **I/O Burst** b. **CPU Burst** c. Memory Burst d. OS Burst

32) An I/O bound program will typically have :
a. a few very short CPU bursts b. many very short I/O bursts
c. many very short CPU bursts d. a few very short I/O bursts

33) The operating system manages
a. Memory b. Processor c. Disk and I/O devices **d. All of the above**

34) The switching of the CPU from one process or thread to another is called :
a. process switch b. task switch c. context switch d. **All of these**

35) Dispatch latency is :
a. the speed of dispatching a process from running to the ready state
b. the time of dispatching a process from running to ready state and keeping the CPU idle
c. **the time to stop one process and start running another one**
d. None of these

36) A problem encountered in multitasking when a process is perpetually denied necessary resources is called
a. deadlock b. **starvation** c. inversion d. aging

37) A CPU bound program will typically have :
a. a few very short CPU bursts b. **many very short I/O bursts**
c. many very short CPU bursts d. a few very short I/O bursts

38) Multithreaded programs are :

a. lesser prone to deadlocks
b. **more prone to deadlocks**
c. not at all prone to deadlocks
d. None of these

39) To ensure that the hold and wait condition never occurs in the system, it must be ensured that : a. whenever a resource is requested by a process, it is not holding any other resources

b. each process must request and be allocated all its resources before it begins itsexecution
c. a process can request resources only when it has none
d. **All of these**

40) The disadvantage of invoking the detection algorithm for every request is : a. overhead of the detection algorithm due to consumption of memory

b. excessive time consumed in the request to be allocated memory
c. **considerable overhead in computation time**
d. All of these

41) A computer system has 6 tape drives, with 'n' processes competing for them. Each process may need 3 tape drives. The maximum value of 'n' for which the system is guaranteed to be deadlock free is :

a.

2 b. 3 c. 4 d. 1

42) 4A system has 3 processes sharing 4 resources. If each process needs a maximum of 2 units then, deadlock :

a. **can never occur** b. may occur c. has to occur d. None of these

43) 'm' processes share 'n' resources of the same type. The maximum need of each process doesn't exceed 'n' and the sum of all their maximum needs is always less than m+n. In this setup, deadlock :

a. **can never occur** b. may occur c. has to occur d. None of these

44) The two ways of aborting processes and eliminating deadlocks are : (choose all that apply)

a. **Abort all deadlocked processes**
b. Abort all processes
c. Abort one process at a time until the deadlock cycle is eliminated d. All of these

45) Those processes should be aborted on occurrence of a deadlock, the termination of which :

a. is more time consuming b. **incurs minimum cost**
c. safety is not hampered d. All of these

46) Cost factors of process termination include : (choose all that apply) a. **number of resources the deadlock process is holding**
b. **CPU utilization at the time of deadlock**
c. amount of time a deadlocked process has thus far consumed during its execution
d. All of the above

47) If we preempt a resource from a process, the process cannot continue with its normal execution and it must be :

a. aborted **b. rolled back** c. terminated d. queued

48) To _____ to a safe state, the system needs to keep more information about the states of processes.

a.abort the process **b. roll back the process** c. queue the process d. None of these

49) If the resources are always preempted from the same process, _____ can occur.

a. deadlock b. system crash c. aging d. **starvation**

50) The solution to starvation is :

a. **the number of rollbacks must be included in the cost factor**

a.

b. the number of resources must be included in resource preemption
c. resource preemption be done instead
d. All of these

51) The strategy of making processes that are logically runnable to be temporarily suspended is called : a. Non preemptive scheduling b. **Preemptive scheduling**
c. Shortest job first d. First come First served

52) Scheduling is :
allowing a job to use the processor b. making proper use of processor
c. **Both i and ii** d. None of these

53) Which one of the following is not shared by threads?
a. program counter b. stack mentioned c. **both (i) and (ii)** d. none of the

54) When the event for which a thread is blocked occurs, a. **thread moves to the ready queue** b. thread remains blocked
c. thread completes d. a new thread is provided

56) The register context and stacks of a thread are deallocated when the thread
a. **terminates** b. blocks c. unblocks d. spawns

57) Thread synchronization is required because
a. all threads of a process share the same address space
b. all threads of a process share the same global variables
c. all threads of a process can share the same files
d. **all of the mentioned**

58) The kernel keeps track of the state of each task by using a data structure called __ a. **Process control block** b. User control block
c. Memory control block d. None of the above

59) In the multi-programming environment, the main memory consisting of _____ number of process.
a. Greater than 100 b. Only one c. Greater than 50 d. **More than one**

a.

60) Which of the following statement is not true?
a. Multiprogramming implies multitasking b. Multi-user does not imply multiprocessing
c. Multitasking does not imply multiprocessing d. **Multithreading implies multi-user**

61) Saving the state of the old process and loading the saved state of the new process is called _____.
a. **Context Switch** b. State c. Multi programming d. None of the above

62) Resource locking _____.
a. Allows multiple tasks to simultaneously use resource
b. **Forces only one task to use any resource at any time**
c. Can easily cause a dead lock condition
d. Is not used for disk drives

63) Operating system is
a. A collection of hardware components b. A collection of input output devices
c. **A collection of software routines** d. All of the above

64) Piece of code that only one thread can execute at a time is called
a. Mutual Exclusion **b. Critical Section** c. Synchronization d. All of these

65) I/O function allows to exchange data directly between an
Process States b. Registers **c. I/O module and processor** d. I/o devices

66) Memory of computer system for storing provides
a. array of characters b. array of alphabets **c. array of words** d. array of numbers

67) Processor-I/O involves data transferring between
a. Computers b. **Processor and I/O modules** **c.** Registers d. User

68) Invalid memory access to computer system is a **a. trap** **b.** program c. process d. interrupt

69) The directory contains special files associated with input output devices such as terminals, line printer etc a. /etc **b. /dev** c. /bin d. /device e. /mnt

70) The utility program that searches a file, or more than one file, for lines which contain strings of a certain pattern
a. Find **b. grep** c. tr d. locate e. pr f. search

a.

71) The Block of every file system contains the major pieces of information about the file system such as file system name , number of blocks reserved for inodes , free inode list etc

a. Inode block **b. Super block** c. Boot block d. Data block

72) Unix OS was first developed at

a. Microsoft Corp, USA **b. AT & T Bell Labs , USA**
c. IBM , USAd.Borlan d. Internationa, USA

73) Internal value associated with the standard error device.

a. 0 b. 1 **c. 2** d.9 e.3

74) A file may have more than one name. This is accomplished using which of the following commands? a. dup **b. ln** c. name d. fork e. cp

75) Which command displays all information about every system process?

a. ps b. ps -f **c. ps -ef** d. ps –a e. ps -u

76) Part of the system which manages the resources of computer system, keep track of the disks, tapes, printers, terminals, communication lines and any other devices.

a. Schedular **b. Kernel** c. Shell d. Resource manager e. System call

77) Chmod 754 on a file

a. allow group and other to read , write b. allow owner to only read
c. allow others to only read d. allow group to only execute

78) If your process refuses to die with kill command in the normal number, signal number option used is

a. 13 **b.9** c. 3 d.0 e.99

79) When we are executing a shell script the shell acts as

An Interpreter b. A Compiler c. An Operating System d. None of the above

80) A null variable X can be created using

a. X= b.X=’’ c.X=”” **d. all the above**

a.

81) init _____ halts the system

a. 1 **b.0** c. h d.5

82) What would the following file permissions mean "rwxr-xr—"? a.
Read, write and execute permission for everyone.

b. **Read, write and execute permission for the file owner, read and execute permission for the group, and only read permission for all others.**

c. The file owner is the only one who can execute the file.

d. People who do not own the file and are not in its group, can only run it. System and Network Administration-I

83) A hierarchical structure consisting of directories and files

a. Track b. cylinder c. partition **d. filesystem**

84) Which of the following is not a component of a user account?

a. home directory b. password c. group ID **d. kernel**

85) The redirection symbol for output is

a. > b.< c.^ **d. |**

86) To find out a file's inode number, use this option on the "ls" command. a. **-i** b. -inode c. -inum d. -in

87) By default, "ps" command will list

a. All processes running of a current users in all terminals

b. **Only processes running in that terminal of the current users**

c. All processes for all users

d. Processes for other users only

88) Which of the following is not a major Unix shell?

a. C shell **b. WIN shell** c. bash shell d. Korn shell

89) The purpose of the PATH variable is to a.
Show the current directory

b. Show the directory path of a file

c. **Tells the shell what directories to search when a command is entered**

d. Tells the shell in which directories new file can be created

a.

90) The run configuration file in Vi is called
a. cshrc b. virc **c. bashrc** d. exrc

91) Use the following command to save and exit from Vi.
ZZ b.:w c. :q! d. wq **e. Both a and d option**

92) Which of the following Unix utilities are not commonly used to process regular expressions?
a. grep b. sed **c. cut** d. awk

93) Which file controls the initialization process?
a. Fstab **b. inittab** c. sysconfigtab d. gettytab

94) Names are associated with the IP addresses, so that users do not have to remembers IP addresses, This association is the job of the
a. IPN **b. DNS** c. INS d. TCP e. IP

95) New users are added into this file.
a. /passwd b. /usr **c. /etc/passwd** d. /home

96) Passing information between programs is called.
a. Program intertalk b. Program communication
c. Interprocess communication d. Task communication

97) To make a variable available to any subshells you execute using command
a. Import b. global **c. export** d. set e. path

98) User request background execution of a program by placing what at the end of the command line
a. # b. @ **c. &** d. * e. !

99) With a umask value of 12, What are the default permissions assigned to newly created files? a.
--x—x-wx **b. -rw-rw-r—** c. -r-xr-xr— d.-rw-rw----

100) The tar command is used to
a. Print the contents of a file b. Reformatting a file before printing

a.

c. Making archive tapes d. Merging a file

101) Which one is not a characteristic of pipes a.
Connect commands
b. Multiple pipes can be used on a command line
c. **Can create individual files for every process output**
d. Can also be used with |tee symbol

102) To create a hidden file in unix system
a. Filename typed in upper case **b. First character of filename is. (dot)**
c. Filename containing # anywhere d. First character of filename is $.

103) The "nice" command is used to
a. Communicate with other users
b. **Improve relationships**
c. Change Priority levels of running processes
d. Create processese. format a document so that its look nice

104) The letters TCP/IP stand for
a. Telecommunication Control Program/Internet Program
b. **Transmission Control Protocol/Internet Protocol**
c. Teleprocessing Conversion Program/Internet Program
d. None of the above

105) Which special variable contains the PID of its own process?
a. $job **b. $$** c. PID d. $ps

106) The process that needs to run in the background as a daemon to ensure that logging happens is: **a. telnetd** b. syslogd c. fsck d. All of these

107) The minimum number of link for a directory is
a. 1 **b. 2** c. 6 d. 3 e. 5

108) Answer the following:-
a. What is the difference between the two commands.
b. $ cat < fileone > filetwo 2> errorlst
c. $ cat > filetwo 2> errorlst < fileone
d. Ans: It's a same command, the order of redirection make no difference

109) What is the meaning of exit status value and how can we access the exit status value of any command
Ans: Exit status meaning the command return value to the environment indicatingit is successfully executed or have error
Exit Status value is stored in environment variable $?

110) Differentiate between Relative path and Absolute path
Ans:Relative path is path relative to the current director, so its start with either. or directory name , Absolute or full path always start with /that is root so user can be in any directory it will direct to that path only Write a command to substitute all occurrences of word "printf "with "cout" from a file myprog.c
Anssed'1,$s/printf/cout/g' myprog.c

111) Explain the directories /bin, /dev and /mnt Ans: /bin contains all binary executable file or user utility
a. /dev contains all device files of the system
b. /mnt is a directory for mounting devices

112) What is operating system?
a. collection of programs that manages hardware resources
b. system service provider to the application programs
c. link to interface the hardware and application programs
d. **all of the mentioned**

113) To access the services of operating system, the interface is provided by the
a. system calls b. API c. library d. assembly instructions

114) Which one of the following is not true?
a. kernel is the program that constitutes the central core of the operating system
b. kernel is the first part of operating system to load into memory during booting
c. **kernel is made of various modules which can not be loaded in running operating system**
d. kernel remains in the memory during the entire computer session

115) The systems which allows only one process execution at a time, are called
a. uniprogramming systems b. uniprocessing systems
c. unitasking systems d. none of the mentioned

116) What is the ready state of a process?
a. **when process is scheduled to run after some execution**
b. when process is unable to run until some task has been completed
c. when process is using the CPU
d. none of the mentioned

117) The number of processes completed per unit time is known as _____. a. Output **b. Throughput** c. Efficiency d. Capacity

118) The state of a process is defined by :
a. the final activity of the process b. the activity just executed by the process
c. the activity to next be executed by the process **d. the current activity of the process**

119) Which of the following is not the state of a process?
a. New **b. Old** c. Waiting d. Running

120) The Process Control Block is:
a. Process type variable **b. Data Structure**
c. a secondary storage section d. a Block in memory

121) The degree of multi-programming is
a. the number of processes executed per unit time b. the number of processes in the ready queue
c. the number of processes in the I/O queue **d. the number of processes in memory**

122) The objective of multi-programming is to: (choose two)

a.

a. **Have some process running at all times** b. Have multiple programs waiting in a queue ready to run
c. To minimize CPU utilization **d. To maximize CPU utilization**

123) The processes that are residing in main memory and are ready and waiting to execute are kept on a list called
a. job queue **b. ready queue** c. execution queue d. process queue

124) The interval from the time of submission of a process to the time of completion is termed as
a. waiting time **b. turnaround time** c. response time d. throughput

125) Which scheduling algorithm allocates the CPU first to the process that requests the CPU first?
a. **first-come, first-served scheduling** b. shortest job scheduling
c. priority scheduling d. none of the mentioned

126) Time quantum is defined in
a. shortest job scheduling algorithm **b. round robin scheduling algorithm**
c. priority scheduling algorithm d. multilevel queue scheduling algorithm

127) An interrupt breaks the execution of instructions and diverts its execution to a.
Interrupt service routine b. Counter word register
c. Execution unit d. control unit

128) How does the processor respond to an occurrence of the interrupt?
a. **By Interrupt Service Routine** b. By Interrupt Status Routine
c. By Interrupt Structure Routine d. By Interrupt System Routine

129) On getting, an interrupt, CPU
a. **finishes the current instruction and moves to interrupt service routine**
b. immediately moves to interrupt service routine without completing current instruction [
c. releases the control on I/O lines and memory lines
d. makes the peripheral device, which requested the interrupt wait for fixed interval of time

130) Round robin scheduling falls under the category of :
a. Non preemptive scheduling **b. Preemptive scheduling**
c. Preemptive and Non-preemptive d. None of these

131) The portion of the process scheduler in an operating system that dispatches processes is concerned with
a. **assigning ready processes to CPU** b. assigning ready processes to waiting queue
c. assigning running processes to blocked queue d. All of these

132) The FIFO algorithm :
a. first executes the job that came in last in the queue
b. **first executes the job that came in first in the queue**

c. first executes the job that needs minimal processor
d. first executes the job that has maximum processor needs

133) Under multiprogramming, turnaround time for short jobs is usually _____ and that for long jobs is slightly _____.
a. Lengthened; Shortened
b. Shortened; Lengthened
c. Shortened; Shortened
d. Shortened; Unchanged

134) The _____ swaps processes in and out of the memory.
a. **memory manager unit**
b. CPU
c. CPU manager
d. user

135) Memory management technique in which system stores and retrieves data from secondary storage for use in main memory is called
a. fragmentation
b. paging
c. none of the mentioned

136) Operating System maintains the page table for **each process**
b. each thread
c. each instruction
d. each address

a.

137) The main memory accommodates: (Choose any two)
a. **operating system** b. CPU **c. user processes** d. All of these

138) In contiguous memory allocation :
a. **each process is contained in a single contiguous section of memory**
b. all processes are contained in a single contiguous section of memory
c. the memory space is contiguous
d. None of these

139) When memory is divided into several fixed sized partitions, each partition may contain _____. a. **exactly one process** b. atleast one process
c. multiple processes at once d. None of these

140) In fixed sized partition, the degree of multiprogramming is bounded by _____. a. **the number of partitions** b. the CPU utilization
c. the memory size d. All of these

141) In internal fragmentation, memory is internal to a partition and
a. is being used **b. is not being used** c. is always used d. None of these

142) Solution to the problem of external fragmentation problem is to
a. **permit the logical address space of a process to be noncontiguous**
b. permit smaller processes to be allocated memory at last
c. permit larger processes to be allocated memory at last
d. All of these

143) External fragmentation exists when
a. **enough total memory exists to satisfy a request but it is not contiguous**
b. the total memory is insufficient to satisfy a request
c. a request cannot be satisfied even when the total memory is free d. None of these

144) When the memory allocated to a process is slightly larger than the process, then
a. **internal fragmentation occur** b. external fragmentation occur
c. both a and b d. neither a nor b

145) Physical memory is broken into fixed-sized blocks called _____.
a. **frames** b. pages c. backing store d. None of these

a.

146) 1 Logical memory is broken into blocks of the same size called _____.
a. frames **b. pages** c. backing store d. None of these

147) The size of a page is typically:
a. varied **b. power of 2** c. power of 4 d. none of the mentioned

148) Because of virtual memory, the memory can be shared among **processes** b. threads c. instructions d. none of the mentioned

149) Swap space exists in
a. primary memory **b. secondary memory** c. CPU mentioned d. none of the

150) When a program tries to access a page that is mapped in address space but not loaded in physical memory, then
a. segmentation fault occurs b. fatal error occurs **c. page fault occurs** d. no error occurs

151) CPU Scheduling is the basis of _____ operating system
a. Batch b. Uniprogramming c. **Multiprogramming** d. Monoprogramming

152) CPU performance is measured through _____.
a. **Throughput** b. MHz c. Flaps d. None of the above

153) Process is
a. Program in high level language kept on disk b. Contents of main memory
c. A program in execution **d.** A program in secondary memory

154) Which among following scheduling algorithms give minimum average waiting time
a. FCFS b. **SJF** **c.** Round robin d. Priority

155) Paging _____.
a. **solves the memory fragmentation problem** b. allows modular programming
c. allows structured programming d. avoids deadlock

156) Virtual memory is _____.
a. An extremely large main memory b. An extremely large secondary memory
c. **An illusion of extremely large main memory** d. A type of memory used in super computers.

157) The two steps of a process execution are: (choose two)
a. **I/O Burst** **b. CPU Burst** c. Memory Burst d. OS Burst

a.

158) An I/O bound process will typically have:
a. a few very short CPU bursts b. many very short I/O bursts
c. many very short CPU bursts d. a few very short I/O bursts

159) A process is selected from the _____ queue by the _____ scheduler, to be executed.
a. blocked, short term b. wait, long term c. **ready, short term** d. ready, long term

160) With round robin scheduling algorithm
a. **using very large time slices converts it into First come First served scheduling algorithm**
b. using very small time slices converts it into First come First served scheduling algorithm
c. using extremely small time slices increases performance
d. using very small time slices converts it into Shortest Job First algorithm

161) Who is called a supervisor of computer activity?
Memory b. **Operating System** **c.** OCI/O Device d. Control Unit
162) The kernel keeps track of the state of each process by using a data structure called a.
Process control block b. User control block
c. Memory control block d. None of the above

163) _____ scheduler selects the jobs from the pool of jobs and loads into the ready queue.
a. **Long term** b. Short term c. Medium term d. None of the above

164) What is Thrashing?
a. **A high paging activity** **b.** A high executing activity
c. An extremely long process d. An extremely long virtual memory

165) Poor response times are caused by
a. Busy processor b. High I/O rate c. High paging rates **d. Any of above**

166) If process is running currently executing, it is in running
a. Mode b. Process c. **State** d. Program

167) Microkernel architecture facilitates
a. Functionality b. **Extensibility** **c. Reliability** **d.** Portability

168) Privileged mode of operating system mode is a
a. user mode b. **kernel mode** **c.** system mode d. both b and c

a.

169) An optimal scheduling algorithm in terms of minimizing the average waiting time of a given set of processes is _____.

a. FCFS scheduling algorithm b. Round robin scheduling algorithm
c. Shorest job - first scheduling algorithm d. None of the above

170) Which of the following memory allocation scheme suffers from External fragmentation?

a. Fixed Memory Partition **b. Dynamic Memory Partition** c. Paging d. None

171) Which of the following is crucial time while accessing data on the disk?

a. **Seek time** b. Rotational time c. Transmission time d. Waiting time 172. A program at

172) the time of executing is called _____.

a. Dynamic program b. Static program c. Binded Program **d. A Process**

173) Using Priority Scheduling algorithm, find the average waiting time for the following set of processes given with their priorities in the order: Process : Burst Time : Priority respectively . P1 : 10 : 3 , P2 : 1 : 1 ,
P3 : 2 : 4 ,
P4 : 1 : 5 ,
P5 : 5 : 2.

a. 8 milliseconds **b. 8.2 milliseconds** c. 7.75 milliseconds d. 3 milliseconds

174) A process is created and initially put in the
ready queue **b. job queue** c. I/O queue d. None

a.

175) PCB =
a. Program Control Block **b. Process Control Block**c. Process
c. Communication Block d. None of the above PCB

176) Round robin scheduling is essentially the preemptive version of _____.
a. FIFO b. Shortest job first c. Shortes remaining d. Longest time first

177) 1 FIFO scheduling is _____.
a. Preemptive Scheduling **b. Non Preemptive Scheduling**
c. Deadline Scheduling d. Fair share scheduling

178) In priority scheduling algorithm
a. CPU is allocated to the process with highest priority
b. CPU is allocated to the process with lowest priority
c. equal priority processes can not be scheduled
d. none of the mentioned

179) In priority scheduling algorithm, when a process arrives at the ready queue, its priority is compared with the priority of
a. all process b**. currently running process** c. parent process d. init process

180) 1 Turnaround time is
a. the total waiting time for a process to finish execution
b. the total time spent in the ready queue
c. the total time spent in the running queue
d. the total time from the completion till the submission of a process

181) Waiting time is
a. the total time in the blocked and waiting queues
b. the total time spent in the ready queue
c. the total time spent in the running queue
d. the total time from the completion till the submission of a process

182) Scheduling is done so as to :
a. increase the waiting time b. keep the waiting time the same
c. decrease the waiting time d. None of these

183) Response time is
a. the total time taken from the submission time till the completion time
b. **the total time taken from the submission time till the first response is produced**

c. the total time taken from submission time till the response is output d. None of these

184) The FCFS algorithm is particularly troublesome for _____.
a. time sharing systems **b. multiprogramming systems**
c. multiprocessor systems d. Operating systems

185) One of the disadvantages of the priority scheduling algorithm is that :
a. it schedules in a very complex manner b. its scheduling takes up a lot of time
c. it can lead to some low priority process waiting indefinitely for the CPU d. None of these

186) CPU scheduling decisions takes place under following conditions a. When a process switches from running to ready state
a. When a process switches from running state to waiting state
b. When a process terminates
c. **All of the Above**

187) What is meant by throughput?
a. Number of processes running in the system
b. **Number of process completed per unit time by the system**
c. Number of processes waiting for CPU per unit time
d. None of the above

188) When CPU becomes idle which scheduler is called?
a. Short term scheduler b. Medium term scheduler c. Long term scheduler d. Any

189) What is a medium-term scheduler?
a. It selects which process has to be brought into the ready queue
b. It selects which process has to be executed next and allocates CPU
c. **It selects which process to remove from memory by swapping** d. None of these

190) What is Turnaround time of a process? a. Time spent in waiting queue
b. **Time spent in ready queue + waiting queue + running state**
c. Time spent in ready queue + waiting queue
d. Time spent in ready queue

191) Which scheduler selects which processes should be brought into the ready queue?

a. Real-term **b.Long-term** c. Medium-term d.Short-term

192) A page fault occurs
a. **when the page is not in the memory**
b. when the page is in the memory
c. when the process enters the blocked state
d. when the process is in the ready state

193) A CPU bound process will typically have
a. **many very long CPU bursts** b. many very short I/O bursts
c. many very short CPU bursts d. **a few very short I/O bursts**

194) The chunks of a memory are known as
a. Sector b. Offset c. Page **d. Frame**

195) Which of the following concept is best to preventing page faults?
a. Paging **b. The working set** c. Hit ratio d. Address location resolution

196) Copying a process from memory to disk to allow space for other process is called
a. Swap out b. Deadlock c. Demand Paging d. Page fault

197) _____ is a large kernel containing virtually the complete operating system, including, scheduling, file system, device drivers and memory management.
a. Multilithic kernel **b. Monolithic kernel** c. Micro kernel d. Macro kernel

198) A ..... architecture assigns only a few essential functions to the kernel,including address spaces, Inter process communication(IPC) and basic scheduling.
a. Monolithic kernel **b. Micro kernel** c. Macro kernel d. Mini kernel

199) With ..... only one process can execute at a time; meanwhile all other process are waiting for the processer. With ..... more than one process can be running simultaneously each on a different processer.
a. Multiprocessing, Multiprogramming b. Multiprogramming, Uniprocessing
c. Multiprogramming, Multiprocessing d. Uniprogramming, Multiprocessing

200) System call routines of operating system are mostly written in
a. C b. C++ c. java d. **both a and b**

201) How does the Hardware trigger an interrupt?
a. **Sending signals to CPU through system bus**
b. Executing a special program called interrupt program
c. Executing a special program called system program
d. Executing a special operation called system call

202) Which is not the function of the Operating system?
a. Memory management b. Disk management c. Application management **d. Virus protection**

203) The page table entry contains_____
a. the information regarding given page is valid or not
b. the information regarding given segment is valid or not
c. the information regarding given page table is valid or not
d. **All of the above**

204) Binary Semaphores are used for _____
a. resource allocation b. critical sections **c. mutual exclusion** d. synchronization

205) Which CPU scheduling algorithm is non-preemptive type from the following?
a. Shortest job first scheduling b. Round robin scheduling
c. Priority based scheduling **d. First come first serve based scheduling**

206) What will be the possibility, when process comes in wait or block state?
a. disk operation b.
time since expire
c. due to the higher priority process arrival **d. All of the above**
207) What is attenuation?
a. Noise of the cable **b. Loss of signal strength** c. Unwanted signals d. None of the above

208) Which one is he correct statement regarding thread? a. Logical extension of the process a.
Very similar to the process
b. hreads have there own address space they do not use the process address space
c. **Threads share the same address space that is used by the process**

209) What linker does?
a. merging object files
b. sorting text and data
c. **resolve symbols across modules**
d. All of the above

210) A pointer is said _____ if the definition of the type to which it points to is not included in the current translation unit. A translation unit is the result of merging an implementation file with its headers and header file
a. This pointer **b. Opaque pointer** c. Function pointer d. Nested pointer

211) Which statement is true for the deadlock?

a. It is very usual, when a process terminates, it became dead process and his lead to dead lock
b. Deadlock arises when a process try to accessa non shareable resources
c. **Deadlock arises when process is holding some more resources that are already hold by some other process and no onewant to release their resources**
d. Deadlock arises when we try to lock the process and the process is in running state that lock become a dead lock

212) By using interrupt which kind of problem will be eliminated?
a. Spooling **b. Polling** c. Job Scheduling d. None of the above

213) Copy-on-write concept is_____
a. applicable only for two unrelated processes
b. used by the processes those created with the help of exec call
c. used by the any kind of process no restriction
d. **used by the related processes**

214) What are the resources for the computer system? a. CPU cycles
b. System buses
c. Operating system code an d data structure
d. **All of the above**

215) Which statement is true from the following?
a. A safe state is a deadlock state always
b. An unsafe state is a deadlock state always
c. **An unsafe state has a probability to be a deadlock state**
d. All are tgrue

216) Virtual memory with paging mechanism (page-replacement technique) provides
a. runtime relocatability b. memory extension
c. memory protection **d. All of the above**

217) With any Disk Scheduling Algorithms, Performance depends on_____
a. Number of requests b**. Number and types of requests**
c. Types of requests d. None of the above

218) Which one is not a part of the kernel?
a. Memory management **b. Debuggers management**
c. Interrupt Management d. Timer and clock management

219) How many processes can be active in a monitor at a time?
a. Any no of processes **b. Only one** c. Only two d. None of the above

220) Which register is use for memory management?
a. base register b. bound register and stack pointe
c. base and bound registeruit d. base and stack pointer register

221) What is the use of the program counter register? a.
It points to the next program in the execution
b. **It points to the next instruction statement in the program**
c. It points to the next block of code in the execution
d. None of the above

222) Which of the following stack operation could result as stack underflow/
a. is empty b**. pop** c. push d. Two or more of the above answers

223) Which statement is true?
a. Cache memory is type of the nonvolatile memory b. RAM stands for reliable access memory
c**. Cache resides between main memory and CPU** d. Hard disk is made up of different layer of the RAM

224) During process execution, which state transaction, is not possible?
a. ready state to running state b. running state to block state
c. block state to terminate state d. block state to ready state

225) What is process control block?
a. It is data structure that represents the process
b. It is a data structure, which is part of the user space, and it represents the process
c. **It is a data structure, which is part of the kernel space, and it represents the process**
d. It is not a data structure which can be in virtual address space it represent the process

226) Paging leads to _____
a**. Internal fragmentations** b. External fragmentations c. Both 1 & 2 d. All of the above

227) Internal Value associated with the standard error device
a. 0 **b. 1** c. 2 d. 9 e. 3
228) The redirection symbol for output is
a. > b. < c. ^ d. |

229) Which command will be used to display the current user id and name?
a. Who b. Which c. Who am i d. where is

230) As an abstraction, what operations apply to processes?
a. create b. exit c. status **d. All of the above**

231) Which command allow you to determine if a host is connected to the internet?
a. cmd b. Is-Ia **c. ping**
d. pwd

232) Computer that handles concurrent users and multiple jobs are called_____
a. Client b. Network Client **c. Network servers** d. All of the above

233) Which of the following make up DOS?
a. Boot files b. File Management files c. Utility files **d. All of the above**

234) The file assign4.html has permissions to set as r w x r w x r w x a.
The file is really a directory and was named incorrectly
b. **Everyone can read, write, and execute the file**
c. It is impossible for a html file to have permissions set that way
d. The file can not be viewed on the WWW

235) Which of the following is true for DLLs?
a. DLLs don't get loaded in to random access memory together with the main program
b. A DLL helps promote developing modular programs
c. **Both 1 and 2**
d. None of the above

236) On a single processor multi-threading generally occurs by _____-
a. Time division multiplexing b. Multi processing **c. Context switching** d. None of the above

237) The ability of an Operating System to execute different parts of a program simultaneously is known as _____
a. Multi - Tasking b. Multi programming **c. Multi – Threading** d. Multi – scheduling

238) Which of the following is main objective of Disk Scheduling?
a. To minimize seek time b. To maximize turnaround time
c. To minimize throughout d. To maximize bandwidth

239) In which of the following condition deadlock will occur? a.
Mutual wait; hold and wait; pre-emption; circular wait
b. Mutual exclusion; hold and no wait; pre-emption; circular wait
c. **Mutual exclusion; hold and wait, pre-emption; circular wait**
d. Mutual exclusion; hold and wait; non pre-emption ; circular wait

240) Which command will be used to display what date is it this Friday?
a. Date-fri b. Date-d fri c. Cal-d fri d. None of the above

241) Which command will be used to print selected parts of lines from each FILE to standard output?
a. Cut [option]…[FILE]… b. Print [option]…[FILE]…
c.Cmp [option]…[FILE]… **d. Comm. [option]…[FILE]…**

242) Multiplexing of a single physical resource involves_____
a. Combining resources based on time b. Combining resources based on space
c. Dividing the resource based on time or space d. All of the above

243) When the processor is in user mode, all addresses are _____
a. Physical address b. Logical address c. Absolute address d. Memory address

244) What is an interrupt?
a. It is an immediate transfer of control caused by an event in the system
b. Some interrupts can only occur when bit 1 of the psw register is 1 c. Both 1 & 2
d. None of the above

245) Plan ahead so that you never get into a situation where deadlock is inevitable is called as _____
a. Deadlock prevention b. Deadlock avoidance c. Deadlock recovery d. Avoiding Mutual exclusion

246) In which situation a process is prevented from proceeding because some other process always has the resources it needs?
a. Locking b. Deadlock c. Starvation d. Blocking

247) Which of the following statement is false?
a. A smaller page size leads to smaller page tables
b. A smaller page size leads to move TLB misses
c. A smaller page size leads to fewer page faults
d. A smaller page size reduces paging I/O throughout

248) Anything that can be used by only a single process at any instant in time is called as _____
a. Memory b. Thread c. Space d. Resources

249) _____ determines which process gets CPU and when
a. Dispatcher b. Scheduler c. Allocator d. Process allocator

250) Which method is used to eliminate fragmentation after it occurs?
a. Compaction b. Segmentation c. Paging **d. All of the above**

251) Which method is used by memory to improve disk performance is used?
a. Disk Scheduling b. Disk caching c. Both 1 & 2 d. None of the above

252) When paging technique be used?
a. It is a solution to external fragmentation problem
b. It is used to allow a process to be allocating
c. Both 1 & 2
d. None of the above

253) 253. Which method is used by a program to make request to operating system?
a. System call b. CPU call c. Memory Management d. Interrupt call

254) The ability of a computer, machine, electronic system or network to maintain limited functionality even when a large portion of it has been destroyed or rendered is called as _____
a. Fault tolerance b. Fault Management **c. Graceful degradation** d. Denial of services

255) Memory allocation _____
a. is a process involves specification of memory addresses to its instructions and data
b. is an aspect of a more general action known as binding
c. **Both 1 & 2**
d. None of the above

256) Which type of binding perform before the operation of a program begins?
a. Static binding b. Dynamic binding c. Synchronous binding d. Asynchronous binding

257) Which of the following statement is true for dynamic allocation?
a. Allocation is performed during execution of a program b. Allocation exactly equals data size
c. No wastage of memory **d. All of the above**

258) Pre-emptive scheduling is used to temporally suspending a running process_____
a. To allow starving processes to run b. Before the CPU time slice expires
c. When it requests I/O d. When interrupt occurs

259) The memory allocated to a process contains _____
a. Code and non static data of the program to be executed b. Stack
c. Program controlled by dynamic data **d. All of the above**

260) Which of the following mode is performing I/O operations?
a. Interrupt mode b. Running mode c. Memory access mode d. Safe mode

261) When a process terminates and all it's child process must also be termed this situation is called as ___

a. Child termination b. Child parent termination
c. Spawn termination **d. Cascading termination**

262) Which of the following register contains address of the next instruction to be executed by the CPU?
a. Program counter register b. CPU registers c. Control register d. Condition code register

263) When an interrupt arises during its execution and the scheduler selects some other program for execution is called as _____
a. Preemption b. Non Preemption c. Priority d. Interrupt Processing

264) 264. Page-replacement technique provides_____
a. Memory contraction b. Compile time relocability
c. Memory protection d. None of the above

265) Swap space resides in _____
a. SRAM b. DRAM c. Processor **d. Disk**

266) Which of the following policy is used by Linux for page replacement?
a. LRU b. Optimal c. FIFO d. MRU

267) Which of the following statement is false?
1) Dirty buffers in the disk cache are written to the cache when the cache is too full
2) Each buffer in the cache has not a buffer header that is allocated in a slab of the slab allocator
3) The vnode data structure of the virtual file system contains pointers to device-specific functions

268) A process sends data to another process and the sender does not wait till the data is received by the receiver. This type of transfer is known as _____
a. Synchronous **b. Asynchronous** c. Blocking d. None of the above

269) Which command would yu use to create a sub-director in your home directory?
a. mkdir b. dir c. cp d. rm

270) Which command will display a calendar?
a. calendar **b. cal** c. dis cal d. view cal

271) The interval between submission of a request and the first response to that request is called as _____
a. Turnaround time b. Time delay **c. Response time** d. Request time

272) A unique number is used to look up an entry in the inode table which gives information on the type, size and location of the file is called as _____
a. Inode value b. Inode c. Inode number **d. All of the above**

273) Which of the following controls the degree of multi programming?
a. Long term scheduler b. Short term scheduler c. Both 1 & 2 d. None of the above

274) How can you view the permission-settings on all files in the current directory?
a. displayall **b. Is-l** c. listall d. listdir

275) Which command sends file content to standard output and list the content of short files to the screen?
a. echo b. cp **c. cat** d. None of the above

276) Which of the following statement is false?
a. Virtual memory is used only in multi-user systems
b. Segmentation suffers from external fragmentation
c. Paging suffers from internal fragmentation
d. Segmentation memory can be paged

277) In which scenario the First-Come, First-Served scheduling policy, I/O bound processes may have to wait long in the ready queue waiting for a CPU bound job to finish?
a. Aging **b. Priority inversion** c. Priority Inheritance d. Convoy effect

278) How can we determined the minimum number of page frames that must be allocated to a running process in a virtual memory environment?
a. the instruction set architecture b. page size
c. number of processes in memory d. physical memory size

279) Bootstrap loader is _____
a. A program, which resides in the user space **b. A program, which resides in ROM**
c. A program, which resides in the RAM d. A program, which is a module of the kernel space

280) POSIX pthread library implementation in Linux schedules_____ a. user threads without the help of the kernel
b. user threads with the help of light weight process
c. user threads with the help of kernel
d. user threads with the help of heavy weight

281) Segmentations leads to _____
a. External fragmentation b. Internal fragmentation c. Both 1 and 2 d. all of the above

282) What is the fundamental scheduling block for operating system?
a. Kernel thread b. Process Control Block (PCB) c. Light Weight Process d. User thread

283) Which inter processes Communication mechanism is fastest to exchange the data between processes?
a. PIPE b. FIFO **c. Shared Memory** d. Message Queue

284) What ping command does?
a. It sends ICMP ECHO_REQUEST to network hosts
b. It sends ICMP ECHO_REQUEST to network servers only
c. It sends ICMP non ECHO_REQUEST to network host
d. It sends ICMP non ECHO_REQUEST to network severs only

285) How can we find out the free space size to use on Linux System hard disk partition?
a. df-hs b. freedisk-hs c. fdisk-hs d. None of the above

286) How can we get the information about the CPU on the Linux system?
a. cat /usr/cpuinfo **b. cat /proc/cpuinfo** c. cat /root/proc/cpuinfo d. cat /root/usr/cpuinfo

287) Loader is use to _____
a. load the kernel from harddisk to main memory
b. **load the appropriate program into the main memory**
c. create the process and load in to the main memory
d. just make the program ready to load and loading in to memory is done by another Process

288) Where the main system message log file information get stored?
a. /var/log/message b. /usr/log/message c. /src/log/message
d./root/log/message 289) Which command can be use on Linux platform to shutdown the system?
a. shutdown-r now b. Shutdown c. init 0 d. init 6

290) What type of file system Linux is using?
a. FAT-32 b. NTFS c. LFS **d. Ext3**

291) What is the kernel architecture for Linux?
a. Micro kernel b. Macro kernel c. Monolithic kernel d. Hybrid kernel

292) What happens when a page fault occur for a valid legal virtual address? a. Process will terminate
b. Process will block
b. None of the above
c. The process will restart after the page is brought to the main memory and page table entry will

293) Virtual memory with paging mechanism (page-replacement technique) provides
a. runtime relocatability b. memory extension c. memory protection **d. All of the above**

294) Which of the following stack operation could result as stack underflow? 1
a. is_empty b. Pop c. Push d. Two or more of the above answers

295) How can we find out the free space size to use Linux system hard disk partition?
a. df-hs b. freedisk-hs c. fdisk-hs d. None of the above

296) _____ means that the data added by a subclass are discarded when an object of the subclass is passed or returned by value or from a function expecting a base class object?
a. Slicing b. Up casting c. Down Casting d. Name Mangling

297) Which CPU scheduling algorithm is non- preemptive type from the following?
4) a. Shortest job first scheduling b. Round robin scheduling
c. Priority based scheduling **d. First come first serve based scheduling**

298) Which system call will you use to get the parent of the process?
a. getp() b. getppid() c. getparentid() d. None of the above

299) _____ means that the data added by a subclass are discarded when an object of the subclass is passed or returned by value or from a function expecting a base class object?
a. Slicing b. Up casting c. Down Casting d. Name mangling

300) 300. Which statement is false?
a. Spanning tree is a tree associated with a network
b. A minimum spanning tree is a spanning tree organized so that the total edge weight between nodes is minimized
c. Minimum spanning tree of a graph gives the shortest distance between any 2 specified nodes d. None of the above

301) An array is having 12 elements, what will be the maximum number of comparisons that
a. 144 b. 12 c. 11 d. 13

302) Normally, when a hardware interrupt occur
a. mode switch and context-saving occur b. context-switch and context-saving occur
c. Both 1 & 2 d. None of the above

303) What happens when a page fault occur for an invalid_illegal virtual address? a. Process will terminate
b. Process will block
c. All of the above
d. The process will restart after the page is brought to the main memory and page table entry will update.

304) _____signal generate when we try to access the illegal memory location using invalid pointer
a. SIGSTOP b. SIGSEGV c. SIGTERM d. SIGNULL

305) An array is having 12 elements, what will be the maximum number of comparisons that required in Merge sort?
a.144 b. 11 c.12 d. 13

306) If a program that analyses an airline's ticketing transactions runs into an error, it should__ a. write the exceptions into a file and continue analysing transactions
b. display an error message and halt processing
c. delete the record containing an error
d. terminate the program

307) inode number represents_____
a. the directory on the file system uniquely **b. all types of files on the file system uniquely**
c. all process running on the system d. use of the code in thefile system

308) Which of the following is a false statement about binary tree?
a. Every binary tree has at least one node b. Every non-empty tree has exactly one root node
c. Every node has at most two children d. Every non-root node has exactly one parent

309) Drivers constitute which part of the Linux Operating System?
a. Kernel b. Shell c. Applications d. GUI

310) Which is the default shell used by the Linux OS?
a. KSH **b. BASH** c. SSH d. ASH

311) Which command will list out all files including hidden files?
a. ls -l b. ls –A c. ls -r **d. ls -a**

312) To copy a directory instead of a file which switch is used in cp?
a. -a b. –v c. -R d. -c

313) Which one of the following uses a relative path?
a. /root b. /var/lib/ **c. /home/student** d. /scripts

314) How does a user find out which directory he is currently working in?
a. cwd b. mv **c. pwd**
d. ls

315) Which command is used to rename a file?

a. ren b. cp **c. mv** d. none of the above

316) Which command is used to remove an empty directory?
a. del b. rm –R c. rm **d. rmdir**

317) Which of the following commands is correct?
a. more emp.db | cut -f 3 b. | cut -f 3 -d " "
c. more emp.db > cut -f 3 -d " " d. more emp.db > cut -f 3

318) The touch command updates what?
a. modification time and access time b. access time only
c. modification time only d. none of the above

319) Which command creates an archive and compresses it as well?
a. tar b. zip **c. gzip** d. none of the above

320) The command to change the ownership is
a. chgrp **b. chmod** c. takeown d. none of the above

321) chgrp does what?
a. Changes the owner b. Creates a new group c. Changes the access rights **d. none of the above**

322) chmod does what?
a. updates the mode of the file b. changes the access rights
c. updates the access time of the file **d. Both a & c**

323) How can read, write, execute (rwx) permission be represented in numeric form? a. 0 **b. 7**
c. 5 d. 8

324) Which command is used only to save a file in vi editor?
a.:wq b. :q c. :qa! **d. none of the above(:w)**

325) Which command is used to copy a block of text in vi editor?
a. y b. w c. p **d. none of the above(yy)**

326) Which command is used to start marking lines in vi editor?
a. ALT + v b. CTRL + v c. SHIFT + v **d. none of the above**

327) Which command is used to start marking a region in vi editor?
a. ALT + v **b. CTRL + v** c. SHIFT + v d. none of the above

328) Which should be the first line in every BASH (shell) script?
a. !#/bin/bash b. /bin/bash **c. #!/bin/bash** d. none of the above

329) Which of the following is a positional parameter?
a. &0 **b. $0** c. @0 d. none of the above

330) Which of the following arithmetic expression is correct?
a. $i=((i+1)) b. i=((i+1)) c. i=$((i+1)) **d. none of the above**

331) Which is a valid statement in a shell script?
a. echo "My name is $name" b. 122=I c. $i=13 d. none of the above

332) Which is NOT a valid statement in a shell script?
a. echo b. 122=I c. i=147 d. none of the above

333) . Which command can be used to modify the color of the text which appears on screen?
a. echo b. color c. tput d. none of the above

334) The if construct always ends with?
a. end if b. stop c. if **d. none of the above(fi)**

335) The else part of the if construct ends with?
a. end else b. stop c. esle **d. none of the above(fi)**

336) While testing an integer variable what does -lt indicate?
a. last **b. less than** c. last value d. none of the above

337) Which is a valid variable name in a shell script?
a.123var b. var* c. $var **d. none of the above**

338) Which is a valid I/O redirection command?
a. more file.txt > /dev/null b. more file.txt c. more file.txt <> cat **d. none of the above**

339) User space and kernel space are defined by:
a. Kernel b. Hardware-CPU c. Both 1 & 2 d. Administrator

340) Conventional RTOS uses_____
a. only kernel space b. only user space
c. may be user space and kernel space d. None of the above

341) Which CPU scheduling algorithm is the Preemptive scheduling?
a. First Come First serve (FCFS) b. Round Robin (RR) c. Both d. None of the above.

342) Which CPU scheduling algorithm may suffer from the Starvation Problem
a. Round Robin (RR) b. First Come First serve (FCFS) c. Priority scheduling d. None of the above.

343) A Multithreaded programming Benefits
a. Increase Responsiveness to user. b. Utilization of multiprocessor architecture.
c. Resource Sharing d. All of above

344) Circular waiting is
a. not a necessary condition for deadlock
b. a necessary condition for deadlock, but not a sufficient condition.
c. a sufficient condition
d. None of the above.

345) In an operating system using paging , if each 32-bit address is viewed as a 20-bit page identifier plus a 12bit offset, what is the size of each page?
a. 2^12 =4096 bytes b. 2^20 bytes c. 20 byte d. None of the above.

346) Advantage of memory management using virtual memory
a. More Process can be loaded in the momery, to try to keep the processor busy
b. A process whose image larger than memory can be executed
c. Both 1 & 2
d. None of the above.

347) Following is not a Disk scheduling algorithm:
a. First Come First serve (FCFS) b. Round Robin c. SCAN d. LOOK

348) Which of the following condition is necessary for the deadlock
a. Mutual exclusion and Hold-and-wait b. No preemption and circular wait
c. Both 1 & 2 d. None of the above.

349) LOOK disk scheduling algorithm:
a. Select the request with minimum seek time from current head position.
b. Moves the head from one end of the disk to other end, servicing request along the way.
c. Moves the head only as far as the final request in each direction, then it reverse direction immediately, without first going all the way to the end of the disk.
d. None of the above.

350) Thrashing is:
a. CPU scheduling algorithm b. disk-scheduling algorithm c. High Paging Activity d. None of the above.

351) Spooling
a. In spooling, a process writes its output to a temporary file rather than to an output device, such as a printer
b. In spooling, a process writes its output to an output device, such as a printer c. Both 1 & 2
d. None of the above.

352) A "critical section" of code is
a. A section that is executed very often, and therefore should be written to run very efficiently.
b. A section of the program that must not be interrupted by the scheduler.
c. A section of the program that is susceptible to race conditions, unless mutual exclusion is enforced. d. A section of the code executed in kernel mode

353) The OS uses a round robin scheduler. The FIFO queue of ready processes holds three processes A, B, C in that order. The time quantum is 18 msec. A context switch takes 2 msec. After running for 13 msec, B will block to do a disk read, which will take 30 msec to complete. Trace what will happen over the first 100 msec.
What is the CPU efficiency over the first 100 msec?
a.80% b.70% c.90% d.100%

354) "Time Quantum" in Round Robin Scheduling algorithm:
a. Time between the submission and completion of a process.
b. Time for the disk arm to move to the desired cylinder
c. Maximum time a process may run before being preempted
d. Time required to switch from one running process to another

355) An OS uses a paging system with 1Kbyte pages. A given process uses a virtual address space Of 128K and is assigned 16K of physical memory. How many entries does its page table contain?
a. 1024 b. 128 c. 512 d. 64

356) What is the "turnaround time" in scheduling algorithms? a. Time for a user to get a reaction to his/her input.
b. Time between the submission and completion of a process
c. Time required to switch from one running process to another
d. Delay between the time that a process blocks and the time that it unblocks

357) "chmod " command in Linux
a. Change the operating system mode b. Change the command mode
c. Change Access mode of file d. None of the above.

358) "grep" Command is used

a. make each column in a document in a separate file
b. combine a file and write them into a temp file
c. **search a file for lines containing a given format.** d. None of the above.

359) A program which is loaded into memory & is executing is commonly referred to as a:
a. Software. b. Job. c. Process. d. Program

360) Bankers Algorithm is used for:
a. Deadlock Characterization b. Deadlock Handling
c. Deadlock avoidance d. Deadlock Detection

361) To enable a process to be larger than amount of memory allocated, we use:
a. TLB. b. Fragmentation. c. Overlays. d. None of the above.

362) A _____ is a memory area that stores data while they are transferred between 2 devices:
a. Spool b. Buffer c. Cache d. Kernel

363) The command used to display long listing of file is:
a. **ls –l** b. ls –a c. ls –t d. ls –r
364) The _____ file stores information about file systems that are mountable during booting:
a. /lib b. /mnt c. /etc/fstab **d. /usr/local**

365) In Linux ____ command is used to change the current working directory & ____ command is Used to print the current working directory on the screen:
a. **cd, pwd** b. pwd, cd c. cd, cp d. cp, cd

366) _____ Is a special user who has ultimate privilege on Linux system:
a. Any user b. Super user c. Administrator d. None of the above

367) In Linux, we can display the content of text file by using the command:
a. display b. show c. cat d. All of the above

368) Which command is used to change the group of a file?
a. change group b. chgrp c. changep d. None of the above

369) If more than one process is blocked, the swapper chooses a process with the _____
a. Lowest Priority. b. Highest Priority. c. Medium priority d. No Priority.

370) In Batch processing system the memory allocator are also called as _____
a. Long – term scheduler b. Short – term scheduler

c. Medium – term scheduler d. Batch – term scheduler.

371) Wait until the desired sector of a disk comes under the R/W head as the disk rotates. This time Is called as _____
a. seek time b. latency time c. transmission time d. Read/Write time

372) All other processes wanting to enter their respective critical regions are kept waiting in a queue called as _____.
a. Ready queue. b. Waiting queue c. Semaphore queue. d. Critical queue.

373) There would be some time lost in turning attention from process 1 to process 2 is called as _____
a. Process transferring. b. Process switching c. Process turning. d. Context switching

374) Some operating system follows the technique of _____ in which you skip two sector and then number the sector (eg After starting from 0,you skip two sector and then number the sector as 1and so on…)
a. Leaving. b. Skipping. c. Interleaving. d. Jumping

375) An alternative to the scheme of DMA is called _____.
a. Programmed I/O. b. Mapped I/O. c. I/O Mapped I/o d. I/O Controller

376) The kernel has to keep track of all the pages frames in terms of whether they are free, and if not, the process to which they are allocated. This is done by maintaining another data structure called _____. a. Page Map Table (PMT). b. Page Frame Data Table (PFDT).
c. Page Table Entry (PTE). d. Disk Block Descriptor (DBD).

377) _____ processes tend to be faster, since they do not have to go to the kernel for every Rescheduling (Context switching).
a. heavyweight processes. b. Lightweight processes. c. Kernel processes. d. System processes

378) To know the name of the Shell program we use following command (Bourne Shell). a. $0 b. $1 c. $2 d. $9

379) To hold the exit status of the previous command _____ command is used.
a. $$ b. $? c. $/ d. $

380) To know the Process id of the current process _____ command is used. a. $$ b. $? c. $/ d. $

381) To know the path of the Shell ____ command is used.
a. PATH b. CDPATH c. SHELL d. PS1

382) To print a file in Linux which command is used
a. print b. ls –p c. lpr d. None

383) To create an additional link to an existing file, which command is used
a. ln b. sbln c. cp d. none

384) The Linux command "cp ch? book"
a. Copies all files starting with ch to the directory book
b. Copies all files with three-character names and starting with ch to the directory book
c. Compress whether a file starting with ch exists in the directory book
d. None of the above

385) . Command used in shell to read a line of data from terminals
a. rline b. line c. lread d. None of these

386) In vi, to change a word in command mode, one has to type
a. cw b. wc c. lw d. none

387) What would be the output of the following shell script?
foo=10 x=foo eval y='$'$x echo $y
a. foo b. 10 c. x d. $x

388) In the following shell script echo "Enter password" read pas while ["$pas" != "secrete"]; do echo "Sorry, try again" read
pas done exit 0
a. If the 'pas' matches with 'secrete' in /etc/passwd file then shell script exits.
b. The shell script gives error in while statement
c. Irrespective of the users input, it always prints "Sorry, try again"
d. If user enters secrete then shell script exits otherwise it will read pas once again

389) The output of the following shell script would be: for var in DAC August 2005 do echo $var echo " C-DAC " done
a. DAC August 2005 b. C-DAC C-DAC C-DAC
c. DAC C-DAC August C-DAC 2005 C-DA d. DAC C-DAC

390) . fun(){ echo "enter a number" read num num=$(($num+1)) echo "$num"
} fun exit 0
The above shell script
a. takes a number from user, increments it, and prints to the terminal.
b. prints "num" to terminal
c. gives error in the line fun (function call), because it should be written as fun()
d. exits without doing anything

391) The computer itself uses _____ language.
a. High level b. Natural c. Assembly **d. Machine**

392) Which of the following is not an operating system?
a. SuSE b. Unix **c. OSD** d. DOS

393) Object modules generated by assemblers may contain unresolved references. These are resolved using other objectmodules by the _____.
a. linker b. loader c. debugger d. compiler

394) Which of the following is not a necessary conditionfor a deadlock?
a. Mutual Exclusion b. Circular wait

c. No preemption of resources **d. None of the above**

395) An operating system is _____.
a. Integrated software b. CD-ROM software **c. System software** d. Application software

396) Match the operating system abstractions in the left column to the hardware components in the right column a. Thread
1. Interrupt Virtual Address Space
2. Memory File System
3. CPU Signal
4. Disk

a. a-2, b-4, c-3, d-1 b. **a-3, b-2, c-4, d-1** **c.** a-1, b-2, c-3, d-4 d. a-4, b-2, c-2, d-1

397) Which of the following file streams is not opened automatically in a UNIX program?
a. Standard terminal b. Standard input c. Standard output d. Standard error

398) Transfer of information to and from main memorytakes place in terms of _____.
a. Bytes b. Words c. Bits d. Nibbles

399) Virtual Memory _____.
a. is an extremely large main memory
b. is an extremely large secondary memory
c. is a type of memory used in supercomputers
d. **allows execution of processes that may notbe completely in memory**

400) Page fault occurs when _____.
a. The page is corrupted by application software b. The page is in main memory

c. The page is not in main memory d. One tries to divide a number by 0

401) An operating system with multiprogramming capability is one that_____.
a. allows several users to use the same program at once by giving each a slice of time
b. **loads several independent processes intomemory and switches the CPU from one jobto another as required**
c. runs programs over more than one processor
d. None of the above

402) Where does swap space reside?
a. Disk b. RAM c. ROM d. On-chip cache

403) A 1000 MB hard disk has 512-byte sectors. Each track on the disk has 1000 sectors. The number of tracks on the disk is _____.
a.1024 **b.2048** c.512 d.1000

404) Which of the following is not an advantage provided by shared libraries?
a. They save disk space
b. They save space in main memory
c. Multiple versions of the same library can be loaded into main memory
d. **None of the above**

405) Spooling is _____.
a. The rewinding of tapes after processing
b. **The temporary storage and management of output to printers and other output devices until they can cope with it**
c. The recording of all user activities in a log file
d. None of the above

406) One function of an operating system is to handleinterrupts. Interrupts are_____. a. a delay in processing due to operating system overload
b. messages received from other computers
c. **signals from hardware or software requesting attention from the operating system** d. None of the above

407) Which of the following is not a solution for the critical section problem?
a. Monitor b. Semaphore c. Critical Region construct **d. Segmentation**

408) . System calls are invoked by using _____.
a. Software interrupt b. Polling c. Indirect jump d. A privileged instruction

409) Paging is the transfer of pages between main memory and the _____.
a. Kernel b. Computer system **c. Auxiliary store** d. Output device

410) Which of the following commands is used to count the total number of lines, words and characters contained in a file?
a. count p **b. wc** c. wcount d.countw

411) The size of the virtual memory depends on the size of the _____.
a. Address bus b. Data bus c. Memory bus d. None of the above

412) What do you mean by computer interrupt?
a. **When a device has data to transfer it makesan interrupt. that means it needs your attention, the processor then stops what it isdoing and deals with the device**
b. The computer is interrupted by a signal fromspace saying it needs to close down theillegal application
c. when on word processor, if you type to muchthe computer makes an interrupt to let youthere is no more room to type
d. When someone tries to add to yourConversation

413) Multiprogramming systems_____.
a. Are easier to develop than singleprogramming systems
b. Execute each job faster
c. **Execute more jobs in the same time period**
d. Are used only one large mainframe Computers

414) The components that take data are located in the _____.
a. Input devices b. output devices c. system unit d. storage component

415) What is one of the advantages of Paging?
a. It does not suffer from internal fragmentation b. It does not suffer from spooling
c. It does not suffer from external fragmentation d. All of the above

416) The heart of any computer is processing the input in order to provide useful _____. a. Information b. Output c. Kernel d. Communication

417) Which of the following memory management schemes does not allow multiprogramming?3
a. Fixed partition b. Dynamic partition
c. Single-user contiguous scheme d. Relocatable dynamic partitions

418) . Which of the following is the correct way of calculating the address of the page frame? a. Multiply the page frame number by the page frame size

b. Divide the page frame size by the page frame number
c. Add the page frame number and the page frame size
d. Multiply the page frame number by the Displacement

419) Which of the following concept is best at preventing page faults? 3
a. Paging b. Hit ratios **c. The working set** d. Address location resolution 420) The total effect of all CPU cycles, from both I/O-bound and CPU-bound jobs, approximates which of the following distribution curves?
a. Gaussian distribution b. Poisson distribution c. Lorentzian Distribution d. Random Distribution

421) Which of the following storage allocation scheme results in the problem of fragmentation?
a. Contiguous storage b. Non-contiguous storage c. Indexed storage d. Direct storage

422) Which of the following commands in UNIX gives the user the capability of executing one program from another program?
a. nice b. fork c. exexv d. nohup

423) What does a cycle in a wait-for graph indicate?
a. Deadlock b. Preemptive c. Non-Preemptive d. None of the above

424) What kind of CPU burst an I/O-bound program would typically have?
a. Long **b. Short** c. Average d. All of the above

425) UNIX uses the _____ page replacement algorithm.
a. LRU b. MRU c. FCFS **d. FIFO**

426) The _____ command will display the absolute pathname for the directory that you are working in.
a. dir **b.pwd** c.ls d. whereami

427) . Which command would you use to create a sub-directory in your home directory? a. mkdir
b. dir c. cp d. rm

428) Which command can be used to display the contents of a file on the screen?
a.ls **b.cat** c. dog d. grep

429) What is the Process Input Queue?
a. A collection of processes
b. A collection of processes on the disk that have already executed
c. **A collection of processes on the disk that are waiting to be brought into memory for execution** d. Both 1 and 2

430) What is Swapping?
a. The process of moving a process within memory to and from the backing store
b. The process of moving a process within memory to backing store
c. The process of moving a process to memory
d. All of the above

431) Using the SJF algorithm, which process is allocated the CPU first?3
a. The process that requests the CPU first b. The process that requests the CPU last
c. The process with the smallest CPU execution time d. None of the above

432) Which of the following is not a scheduling algorithm?
a. First-Come First-Serve **b. Round Bear** c. Shortest Job First d. None of the above
433) Which process is allocated the CPU first in FCFS algorithm?
a. The process that requests the CPU first b. The process that requests the CPU last
c. Processes are allocated the CPU randomly d. None of the above

434) What will be the order when information is processed with direct access?
a. Any order b. Sequential order c. Non-sequential order d. None of the above

435) What will be the order when information is processed with sequential access?
a. Any order **b. Sequential order** c. Non-sequential order d. None of the above

436) A memory management technique used to improve computer performance is_____. a. Selecting memory chips based on their cost
b. Storing as much data as possible on disk
c. **Using the cache to store data that will most likely be needed soon**
d. Preventing data from being moved from the cache to primary memory

437) What do you mean by defragmentation?
a. keyboard that allows for a more naturalpositioning of your arms and hands.
b. The time it takes to read/write head to moveto a specific data track; one of the delaysassociated with reading or writingdata on acomputer disk drive.
c. Pointing device you can use instead of a mouse. These devices sense the position of your finger and then move the pointer accordingly.
d. **A utility that reduces the amount of fragmentation by physically organizing the contents of the disk to store the pieces of each file contiguously.**

438) . Which of the following memory management schemes optimizes fragmentation? a. Single-user contiguous scheme
b. Fixed partition

c. Dynamic partition
d. **Relocatable dynamic partitions**

441) The _____ is used to store the highest location in memory accessibleby each program.

442) _____ is the process of collecting fragments of available memory space into contiguous blocks by moving programs and data in a computer's memory or disk.

443) Which of the following are the disadvantages of a fixed partition scheme (choose all that apply)? a. **Requires that the entire program be loaded into memory**
b. **Requires that the entire program be stored contiguously**
c. **Requires that the entire program remain in memory until the job is completed**
d. Does not allow multiprogramming

444) The phenomenon of partial usage of fixed partitions and the coinciding creation of unused spaces within the partition is called _____

445) Computers use the _____ language to process data.
a. Processing b. kilobyte **c. Binary** d. Representational

446) Round-robin scheduling is _____.
a. Non- preemptive b. It depends **c. Preemptive** d. None of the above

447) Binary Semaphores are used for _____.
a. resource allocation b. critical sections c. mutual exclusion d. synchronization

448) What dispatcher does?
a. Select the process from the ready queue b. Run the process from the ready queue
c. Select and run the process from the ready queue d. None of the above

449) Which one is the correct statement regarding thread? a. Logical extension of the process.
b. Very similar to the process.
c. Threads have there own address space they do not use the process address space.
d. Threads share the same address space that is used by the process

450) During process execution, which state transaction,is not possible?
a. Ready state to running state b. Running state to block state
c. Block state to terminate state d. Block state to ready state

451) _____ signal generate when we try to access the illegal memory location using invalid pointer.

a. SIGSTOP b. SIGSEGV c. SIGTERM d. SIGNULL

452) Which Inter Process Communication mechanism is fastest to exchange the data between processes? a. PIPE b. FIFO c. Shared Memory d. Message Queue

453) Bootstrap loader is _____.
a. A program, which resides in the user space. b. A program, which resides in ROM.
c. A program, which resides in the RAM. d. A program, which is a module of the kernel space.

454) The page table entry contains _____.
a. the information regarding given page is valid or not.
b. the information regarding given segment is valid or not.
c. the information regarding given page table is valid or not.
d. All of the above

455) POSIX pthread library implementation in Linux schedules _____
a. user threads without the help of the kernel. b. user threads with the help of light weight process.
c. user threads with the help of the kernel. d. user threads with the help of heavy weight process.

456) Segmentation leads to _____.
a. External Fragmentation b. Internal Fragmentation c. Both 1 and 2 d. All of the above

457) In static priority based scheduling _____.
a. Priorities are decided at the time of the design and not changed during execution.
b. Priorities are decided at the time of design and may be changed during execution by APIs.
c. Priorities are decided by the scheduler during execution.
d. All of the above

458) Paging leads to _____.

459) a. Internal Fragmentation b. External Fragmentation c. Both 1 and 2 d. All of the above

460) Conventional RTOS uses _____
a. only kernel space. b. only user space.
c. may be user space and kernel space. d. None of the above

461) With any Disk Scheduling Algorithms, Performance depends on _____.
a. Number of requests b. Number and types of requests
c. Types of requests d. None of the above

462) How can we get the information about the CPU onthe Linux system?
a. cat /usr/cpuinfo **b. cat /proc/cpuinfo** c. cat /root/proc/cpuinfo d. cat /root/usr/cpuinfo

463) Which is the Linux kernel image file from thefollowing and what is location in the file system? a. kimage and location is /boot b. kernelimage and location is /usr
c. vmliunz and location is /boot d. kimage and location is /usr

464) inode number represents _____.
a. the directory on the file system uniquely. **b. all types of files on the file system uniquely.**
c. all process running on the system. d. use of the inode in the file system.

465) Which one is default shell for the Linux?
a. csh b. tcsh c. ksh d**. bash**

466) Which statement is true?
a. Process is a passive entity
b. We cannot divide process in further threads.
c. **Process is an active instance of the program.**
d. Threads do not use the memory spaceprovided by the process.

467) Which module gives control of the CPU to the process selected by the short-term scheduler?
a. none of the mentioned b. interrupt c. **dispatcher** d. scheduler

468) The interval from the time of submission of a process to the time of completion is termed as
a. **turnaround time** b. waiting time c. response time d. throughput

469) In priority scheduling algorithm a. none of the mentioned
b. equal priority processes can not be scheduled
c. **CPU is allocated to the process with highest priority**
d. CPU is allocated to the process with lowest priority

470) Time quantum is defined in
a. priority scheduling algorithm b. **round robin scheduling algorithm**
b. multilevel queue scheduling algorithm d. shortest job scheduling algorithm

471) Which one of the following can not be scheduled by the kernel?
a. none of the mentioned b. process c. kernel level thread d. **user level thread**

472) The two steps of a process execution are : (choose two)
a. OS Burst b. Memory Burst c. **I/O Burst** d. **CPU Burst**

473) Turnaround time is :
a. the total time spent in the ready queue
b. the total time spent in the running queue
c. the total waiting time for a process to finish execution
d. **the total time from the completion till the submission of a process**

474) Complex scheduling algorithms :
a. **are very appropriate for very large computers**
b. use minimal resources
c. use many resources
d. All of these

475) The FIFO algorithm :
a. first executes the job that needs minimal processor
b. first executes the job that has maximum processor needs
c. **first executes the job that came in first in the queue**
d. first executes the job that came in last in the queue

476) The offset 'd' of the logical address must be :
a. **between 0 and segment limit** b. greater than segment limit
c. greater than the segment number d. between 0 and the segment number

477) The address of a page table in memory is pointed by
a. page register b. program counter c**. page table base register** d. stack pointer

478) The page table contains
a. page size b. none of the mentioned
c. page offset **d. base address of each page in physical memory**

479) In contiguous memory allocation : a.
None of these
b. **each process is contained in a single contiguous section of memory**
c. the memory space is contiguous
d. all processes are contained in a single contiguous section of memory

480) The operating system and the other processes are protected from being modified by an already running process because :
a. they are in different logical addresses
b. they are in different memory spaces
c. they have a protection algorithm
d. **every address generated by the CPU is being checked against the relocation and limit registers**

481) When memory is divided into several fixed sized partitions, each partition may contain _____. a. multiple processes at once b. None of these
c. **exactly one process** d. atleast one process

482) In internal fragmentation, memory is internal to a partition and :
a. is being used b. None of these c. **is not being used** d. is always used

483) Another solution to the problem of external fragmentation problem is to : a. All of these
b. permit larger processes to be allocated memory at last
c. permit smaller processes to be allocated memory at last
d. **permit the logical address space of a process to be noncontiguous**

484) _____ is generally faster than _____ and _____.
a. **first fit, best fit, worst fit** b. worst fit, best fit, first fit
c. None of these d. best fit, first fit, worst fit

485) External fragmentation exists when :
a. A request cannot be satisfied even when the total memory is free
b. **Enough total memory exists to satisfy a request but it is not contiguous**
c. None of these
d. The total memory is insufficient to satisfy a request

486) Physical memory is broken into fixed-sized blocks called _____.
a. pages b. None of these c. **frames** d. backing store

487) Every address generated by the CPU is divided into two parts : (choose two)
a. frame bit b. **page offset** c. **page number** d. frame offset

488) The _____ table contains the base address of each page in physical memory.
a. **page** b. process c. frame d. memory

489) With paging there is no _____ fragmentation.
a. None of these b. internal c. either type of d. **external**

490) The page table registers should be built with _____.
a. very low speed logic b. None of these
b. **very high speed logic** d. a large memory space

491) What is operating system?

a. **system service provider to the application programs**
b. link to interface the hardware and application programs
c. all of the mentioned
d. collection of programs that manages hardware resources

492) Which one of the following is not true?
a. kernel is the program that constitutes the central core of the operating system
b. kernel is the first part of operating system to load into memory during booting
c. kernel remains in the memory during the entire computer session
d. **kernel is made of various modules which can not be loaded in running operating system**

493) Which one of the following error will be handle by the operating system? a. lack of paper in printer b. power failure
c. connection failure in the network d. **all of the mentioned**

494) The main function of the command interpreter is a. to handle the files in operating system
b. none of the mentioned
c. **to get and execute the next user-specified command**
d. to provide the interface between the API and application program

495) By operating system, the resource management can be done via
a. space division multiplexing b. none of the mentioned
b. both (a) and (b) d. time division multiplexing

496) If a process fails, most operating system write the error information to a
a. new file b. **log file** c. none of the mentioned d. another running process

497) Which facility dynamically adds probes to a running system, both in user processes and in the kernel?
a. DAdd b. DLocate c. **DTrace** d. DMap

498) Which one of the following is not a real time operating system?
a. RTLinux b. VxWorks c. **Palm OS** d. Windows CE

499) The OS X has
a. **hybrid kernel** b. monolithic kernel
c. monolithic kernel with modules d. microkernel

500) The systems which allows only one process execution at a time, are called
a. **uniprogramming systems** b. uniprocessing systems

c. unitasking systems d. none of the mentioned

501) In operating system, each process has its own a. address space and global variables
b. open files
c. pending alarms, signals and signal handlers
d. **all of the mentioned**

502) A process can be terminated due to
a. killed by another process b. **all of the mentioned** c. fatal error d. normal exit

503) What is the ready state of a process?
a. when process is unable to run until some task has been completed
b. **when process is scheduled to run after some execution**
c. when process is using the CPU
d. none of the mentioned

504) The address of the next instruction to be executed by the current process is provided by the
a. process stack b. **program counter** c. pipe d. CPU registers

505) The number of processes completed per unit time is known as _____.
a. **Throughput** b. Efficiency c. Output d. Capacity

506) The state of a process is defined by : a. **the current activity of the process** b. the activity to next be executed by the process
c. the activity just executed by the process
d. the final activity of the process

507) Which of the following is not the state of a process ?
a. New b. Waiting c. Ready d. Terminated **e. Old**

508) The entry of all the PCBs of the current processes is in :
a. Process Register b. Process Unit c. Program Counter d. **Process Table**

509) In a programmed input/output(PIO) :
a. the CPU writes one data byte to the data register and sets a bit in control register to show that a byte is available
b. the CPU receives an interrupt when the device is ready for the next byte
c. the CPU runs a user written code and does accordingly
d. **the CPU uses polling to watch the control bit constantly, looping to see if device is ready**

510) Fragmentation is

a. fragments of memory words unused in a page
b. fragments of memory words used in a page
c. dividing the main memory into equal-sized fragments
d. dividing the secondary memory into equal sized fragments

511) 516. Critical region is
a. the portion of the main memory which can be accessed only by one process at a time
b. a part of the operating system which is not allowed to be accessed by any process
c. **a set of instructions that access common shared resource which exclude one another in time** d. none of the above

512) In a time-sharing operating system, when the time slot given to a process is completed, the process goes from the RUNNING state to the
a. READY state b. BLOCKED state c. TERMINATED state d. SUSPENDED state

513) Pre-emptive scheduling, is the strategy of temporarily suspending a running process
a. when it requests (I/O) b. to allow starving processes to run
c. before the CPU time slice expires d. none of the above

514) Some computer systems support dual mode operation—the user mode and the supervisor or monitor mode. These refer to the modes
a. of memory access
b. by which user programs handle their data
c. by which the operating system executes user programs
d. **in which the processor and the associated hardware operate**

515) In Round Robin CPU scheduling, as the time quantum is increased, the average turn around
a. remains constant **b. varies irregularly** c. increases d. decrease

516) .Suppose that a process is in 'BLOCKED' state waiting for some I/O service. When the service is completed, it goes to the
a. RUNNING state **b.READY state** c. SUSPENDED state d. TERMINATED state

517) To obtain better memory utilization, dynamic loading is used. With dynamic loading a routine is not loaded until it is called for. For implementing dynamic loading,
a. special support from operating system is essential
b. special support from hardware is essential
c. special support from both hardware and operating system are essential
d. **user programs can implement dynamic loading without any special support from the operating system or the hardware.**

518) Semaphores are used to solve the problem of
a. race condition b. mutual exclusion c. process synchronization **d. Both (B) and (C)**

519) Dijkstra's banking algorithm in an operating system solves the problem of
a. mutual exclusion b. context switching **c. deadlock avoidance** d. deadlock recovery

520) Virtual memory is
a. an extremely large main memory b. an extremely large secondary memory
c. a type of memory used in super computers **d. an illusion of an extremely large memory**

521) 526. Overlay is
a. a specific memory location
b. a part of an operating system
c. overloading the system with many user files
d. **a single contiguous memory that was used in the olden days for running large programs by swapping.**

522) The only state transition that is initiated by the user process itself is
a. block b. wakeup c. dispatch d. none of the above

523) Kernel is
a. the software which monitors the operating system
b. **the set of primitive functions upon which the rest of operating system functions are built up**
c. considered as the critical part of the operating system
d. none of the above

524) Sector interleaving in disks is done by
a. the operating system b. the disk manufacturer
c. the disk controller cord d. none of the above

525) Dirty bit is used to show the a.
wrong page in the memory
b. page with corrupted data
c. page that is less frequently accessed
d. **page that is modified after being loaded into cache memory**

526) The first-fit, and the worst-fit algorithm can be used for
a. linked allocation of memory b. indexed allocation of memory
c. contiguous allocation of memory d. all of the above

527) In a paged memory, the page hit ratio is 0.35. The time required to access a page in secondary memory is equal to 100 ns. The time required to access a page in primary memory is 10 ns. The average time required to access a page is

a. 3.0 ns b. 68.0 ns **c. 68.5 ns** d. 78.5 ns

528) In a multi-user operating system, 20 requests are made to use a particular resource per hour on an average. The probability that no requests are made in 45 minutes is

a. e-15 b. e-5 c. 1 - e-5 **d. 1 – e-10**

529) Disk scheduling involves deciding

a. which disk should be accessed next
b. **the order in which disk access requests must be serviced**
c. the physical location where files should be accessed in the disk
d. none of the above

530) In a multiprogramming environment

a. more than one process resides in the memory
b. the programs are developed by more than one person
c. the processor executes more than one process at a time
d. a single user can execute many programs at the same time

531) In which of the following directory systems, is it possible to have multiple complete paths for a file starting from the root directory?

a. Single level directory b. Two level directory
c. Tree structured directory **d. Acyclic graph directory**

532) Which of the following is true?

a. The linkage editor links object modules during compiling or assembling.
b. **The linkage editor links object modules and resolves external references between them before loading.**
c. The linkage editor resolves external references between the object modules during execution time.
d. The linkage editor is used to edit programs which have to be later linked together.

533) Fence register is used for

a. file protection b. CPU protection **c. memory protection** d. all of the above

534) If the property of locality of reference is well pronounced in a program a. the number of page faults will be more

b. the number of page faults will be less
c. execution will be faster
d. **Both (B) and (C)**

535) With a single resource, deadlock occurs
a. if there are only two processes competing for that resource
b. if there is a single process competing for that resource
c. if there are more than two processes competing for that resource
d. **none of the above**

536) Supervisor call
a. is a call with control functions
b. is a call made by the supervisor of the system
c. **are privileged calls that are used to perform resource management functions, which are controlled by the operating system.**
d. is a call made by someone working in root directory

537) Working set (t, k) at an instant of time, t, is the set of a. k references with high frequency
b. **pages that have been referenced in the last k time units**
c. k future references that the operating system will make
d. future references that the operating system will make in the next 'k' time units

538) Concurrent processes are processes that **a. overlap in time**
b. do not overlap in time
c. are executed by a processor at the same time
d. none of the above

539) In paged memory systems, if the page size is increased, then the internal fragmentation generally **a. becomes more** b. becomes less c. remains constant d. none of the above

540) Which of the following is an example of a SPOOLED device?
a. The secondary memory device in a virtual memory system.
b. **A line printer used to print the output of a number of jobs.**
c. The terminal used to enter the input data for a program being executed. d. None of the above

541) The page replacement policy that sometimes leads to more page faults when the size of the memory is increased is
a. FIFO b. LRU c. no such policy exists d. none of the above

542) An operating system contains 3 user processes each requiring 2 units of resource R. The minimum number of units of R such that no deadlock will ever occur is
a. 3 **b. 4** c. 5 d. 8

543) At a particular time of computation, the value of a counting semaphore is 7. Then 20 P operations and 'x' V operations were completed on this semaphore. If the final value of the semaphore is 5. x will be
a. 15 b. 22 **c. 18** d. 14

544) Memory protection is of no use in a
a. single user system b. non-multitasking system
c. non-multiprogramming system **d. none of the above**

545) Which of the following are single-user operating systems?
a. MS-DOS b. UNIX c. XENIX **d. Both (A) and (C)**

546) The size of the virtual memory depends on the size of the
a. address bus b. data bus c. main memory d. none of the above

547) A computer system has 6 tape drives, with 'n' processes competing for them. Each process may need 3 drives. The maximum value of 'n' for which the system is guaranteed to be deadlock free is
a. 1 **b. 2** c. 3 d 4

548) Which of the following are true?
a. Re-entrant procedures can be called recursively.
b. Re-entrant procedures cannot be called recursively.
c. A re-entrant procedure can be called even before the procedure has not returned from its previous call.
d. Both (A) and (C) are true

549) In a system that not support swapping
a. the loader binds relocatable addresses to physical addresses.
b. the compiler normally binds symbolic addresses to physical addresses.
c. the compiler normally binds symbolic addresses (variables) to relocatable addresses. **d. Both (A) and (C)**

550) Spatial locality refers to the problem that once a location is referenced
a. it Will referenced again b. it will not be referenced again
c. a nearby location will be referenced soon d. none of the above

551) Page fault occurs when
a. the page is in main memory **b the page is not in main memory**
c. one tries to divide a number by 0 d. the page is corrupted by application software

552) Determine the number of page faults when references to pages in the order - 1, 2, 4, 5, 2, 1, 2, 4. Assume that the main memory can accommodate 3 pages and the main memory already has the pages 1 and 2, with page 1 having been brought earlier than page 2, (Assume LRU algorithm is used)
a. 3 b. 5 **c. 4** d. none of the above

553) Which of the following are real-time systems?
a. An on-line railway reservation system b. A process control system
c. Aircraft control system **d. Both (B) and (C)**

554) Necessary conditions for deadlock are a.
Non-preemption and circular wait
b. Mutual exclusion and partial allocation
c. **Both (a) and (b)**
d. None of the above

555) At a particular time, the value of a counting semaphore is 10. It will become 7 after
a.3 V operations b. 3 P operations
c. 13 P operations and 10 V operations **d. Both (B) and (C)**

556) Mutual exclusion problem occurs
a. among processes that share resources
b. between two disjoint processes that do not interact
c. among processes that do not use the same resource
d. none of the above

557) Which of the following.is a service not supported by the operating system?
a. I/O operation **b. Compilation** c. Accounting d. Protection

558) A state is safe if the system can allocate resources to each process (up to its maximum) in some order and still avoid deadlock. Which of the following are true?
a. Deadlocked state is unsafe.
b. Deadlocked state is a subset of unsafe state.
c. Unsafe state may lead to a deadlock situation.
d. **All are true.**

559) In which of the following scheduling policies does context switching never take place?
a. Round-robin b. Shortest job first c. First-cum-first-served **d. Both (B) and (C)**

560) What do the following Abbreviations stand for?
HRQ=
a. FAT= file allocation table. b. PCB= process control block
c. LWP=light weight process d. DMA=direct memory access.

561) Which of the following is a non-preemptive O.S.?
a. UNIX b. Windows 95 c. Windows NT **d. None**

562) The following is not a form of IPC
a. Semaphore b. Pipe c. Shared memory **d. Buffering**

563) The fol. is a part of FAT
a. Sector info b. Disk type c. Modified info d. Date info

564) Device files in UNIX are
a. Device drivers b. Special files c. Pipes d. Unstructured files

565) The time of admission of a job to ready queue to completion is :
a. Turnaround time b. Burst time c. Response time

566) The fol. Signal is sent by the DMA controller :
a. HREQ b. HLDA c. DRQ

567) The main purpose(s) of an Operating System is/are:
a. convenience for the user b. efficient operation of the computer system
c. optimal use of computing resources **d. All of the above**

568) The signal the keyboard sends to the computer is a special kind of message called ___.
a. keyboard request b. keyboard controller c. interrupt controller **d. interrupt request**

569) The available routing schemes are :
a. fixed routing b. virtual routing c. dynamic routing

570) The interval from the time of submission of a process to the time of completion is _____.
a. Turnaround time b. Waiting time **c. Response time**

571) The I/O subsystem consist of:
a. A memory management component including buffering, caching, and spooling
b. A general device-driver interface
b. Drivers for specific hardware devices
a. All of the above

572) Which of the following CPU scheduling algorithmswill prevent starvation problem?
a. Shortest-job-first b. Priority-scheduling
c. Priorit echanism y-scheduling with aging d. None of the above

573) Which of the following statements is true for a deadlock state a.
The system cannot run any process
b. The system can run processes barring those involved in the deadlock
c. A running process cannot request any new resourced.
d. All processes in the ready queue enter the wait queu

574) The problem of thrashing may be reduced by
a. Using prepaging mechanism b. Writing well structured programs
c. Both 1 and 2 d. Neither 1 nor 2

575) Which of the following statements is not true?
a. A directory is a special type of file b. A directory is used to store file attributes
c. A directory is used to store file data d. A directory is used to store file access information

576) . Biometric devices are used for user authentication in
a. Proof by knowlege method b. Challenge response method
c. Proof by possession method d. Proof by property method

577) A file system uses the contiguous space allocation mechanism for disk space allocation. For better utilization of disk space, this file system must use
a. A garbage collection mechanism b. A disk compaction mechanism
c. A linked-block allocation mechanism d. An indexed-block allocation mechanism

578) Which of the following statements is true?
a. A computer virus is a complete program that makes active attacks
b. A computer virus is a program segment that makes passive attacks
c. A logic bomb is a program segment that makes passive attacks
d. A logic bomb is a program that makes active attacks

579) The purpose of virtual memory system is to a.
Allow multiprocessing
b. Allow multiprogramming
c. Allow batch processing
d. Allow execution of a program that requires larger memory than the size of the physical main memory

580) Which of the following is NOT a part of a process control block:
a. Values of CPU registers b. CPU scheduling information
c. Memory limits of the process d. List of files accessible to the process.

581) Suppose the architecture of a computer system is layered into the following four layers –
a. Operating systems software b. users' applications software
c. hardware d. programming environment software

582) Which of the following is a logical sequence of the four layers from bottom to top?
a. 1, 2, 3, 4 b. 1, 3, 4, 2 c. 3, 1, 4, 2 d. 3, 4, 1, 2

583) A Job Control Language is used for
a. telling the system about a job's resource requirements
b. telling the system administrator / operator about job's resource requirements.
c. telling the programmer how to program the resource requirements of a job. d. none of the above

584) Which was the first processor to introduce protected mode?
a) 8086 b) 80286 c) 80386 d) 80486

585) The protected mode is necessary for –
a. multi-tasking system b. multi-user system c. both a and b d. 16 bit programming

586) The segmented memory is provided mainly.
a. for higher speeds b.to maintain compatibility with old processors
c. for ease of application programming d. simple hardware

587) Which of the following features is NOT found in RISC architectures?
a. A limited instruction set b. A large number of registers
c. Virtual memory d. A large number of execution modes

588) The first CPU with P6 architecture was –
a. Pentium b. Pentium Pro c. Pentium II d. Pentium III

589) The fastest storage element is –
a. CD-ROM b. DRAM c. EDO-DRAM d. SDRAM

590) Which peripheral requires the highest data transfer rate?
a. Sound Card b. Network card c. Hard disk d. Graphics Adapter

591) A virtual memory is required for -
a. increasing the speed
b. increasing the addressing modes
c. overcoming the size limitation of main memory
d. overcoming the size limitation of cache memory

592) When fork( ) is given
a. It creates a child process b. Allocates slot in process table
c. Returns 0 to parent & ID to child d. All of the above

593) A TSR is a program which will
a. Be resident in the memory after termination of program
b. Be called as and when the program is executed
c. Terminate and Soon Remove the program from the memory
d. All of the above

594) CPU performance is based on
a. ALU width b. Clock speed **c. Number of instructions executed per second**

595) In the systems which do not have multiple CPUs, is the 'cache coherency' an issue while design? a. Yes b. No

596) 80286 the addressing scheme is _____ addressing c
a. 8 bit b. 16 bit c. **24 bit `** **d.**28 bite. 32 bit

597) Shell executes $0 and returns the
a. Parameters entered in the command line b. Program name c. All of the above

598) Profile file is present in
a. /usr b. /usr/user1 c. /etc/admin d. None of the above

599) Peak Bandwidth of a 64-bit, 33 MHz based PCI bus would be:
a. 133 MB/s b. 266 MB/s c. 512 MB/s d. 33 MB/s

600) Main advantage of EISA bus over micro-channel bus was:
a. It offered more bandwidth over micro-channel b. It had software configurable devices
c. It was backward compatible with ISA d. It made the existing peripherals run faster.

601) Which of the following devices is asynchronous?
a. SSRAM b. EPROM c. Disk controllers d. All of the above.

602) Which of the following operating systems is available for non-intel platforms?
a. Windows-NT b. Solaris c. linux d. all of the above.

603) Cache memory refers to _____.
a. cheap memory that can be plugged into the mother board to expand main memory
b. **fast memory present on the processor chip that is used to store recently accessed data**
c. a reserved portion of main memory used to save important data
d. a special area of memory on the chip that is used to save frequently used constants

Fill in the blanks:

1) Single system image is obtained in case of _____

2) Turnaround Time refers to _____.

3) Short-term Scheduler or CPU-Scheduler_____ scheduler selects the process that is ready to execute to CPU.

4) Banker's algorithm is an example of _Deadlock___ avoidance.

5) _____ is an example of Distributed operating system.

6) _Round Robin_ is an example of timesharing scheduling policy.

7) _____is an example of shareable resource and _____ is an example for non shareable resource.
FIFO and _Optimum page replacement algorithm_ are the popular page replacement algorithms.

8) _____ is to NT , where as _____ is to DOS and _____ is to UNIX.

9) Give the expansion of the following with reference to the operating systems concepts: FCB is

10) _____IOCS is _____

11) Throughput in case of multiprogramming is Number of programs processed by it per unit time _.

12) _____is process of modifying the addresses used in the address sensitive

13) A program is a Passive entity , whereas a process is a Active entity.

14) Mutex is a _Binary__Semaphore.

15) _____ is the coincidence of high paging traffic and low CPU utilization.

16) FCFS stands for __First Come First Served__.

17) The Scheduling policy in case of a batch processing system is

18) _____.

19) Multiprogramming degenerates to _____ system if there is no proper mix of CPU and I/O bound jobs.

20) DMA stands for _ direct memory access __

21) Protection of memory is ensured using _____ and _____.

22) _____ is forceful deallocation of a resource.

23) SPOOLING stands for simultaneous peripheral operations on-line

24) A _____ operating system is an operating system which requires a timely response from a computer system.

25) _____ is a program in execution.

26) DOS is an example of _____ user system.

27) Unix is an example of _____ user system.

28) Unix uses _____ scheduling policy .

29) _____ and _____ are the goals of an operating system.

30) _____ is a distributed operating system.

31) The _____ determines which process is to be executed next.

32) PSW stands for Pogram Status Word

33) Mutex is an acronym for Abbrevations

34) A tape is a Magnetic device.

35) Single system image is obtained in case of _____

36) Turnaround Time refers to _____.

37) Short-term Scheduler or CPU-Scheduler scheduler selects the process that is ready to execute to CPU.
38) _____ is an example of Distributed operating system.

39) Round Robin is an example of timesharing scheduling policy.

40) _____is an example of shareable resource and _____ is an example for nonshareable resource.

41) _____ and _____ are the popular page replacement algorithms.

42) Unix is a _____, _____, and _____ operating system.

43) Single system image is obtained in case of _____ 44) Turn around Time refers to _____.

45) Short-term Scheduler or CPU-Scheduler scheduler selects the process that is ready to execute to CPU.
46) Banker's algorithm is an example of _ Deadlock___ avoidance.
47) _____ and _____ are the popular page replacement algorithms.

48) A file is anything held on _____ storage.

49) Compaction is done when you have _____ fragmentation.

50) _____ is when more time is spent in paging than in actually running programs.

51) A thread is a Lightweight process.

52) The process of loading the OS into main memory is done by the _____.

53) The motivations behind networks are _____, _____, _____ & _____.
54) NRU stands for _____ and LRU stands forLeast Recently used .

55) SPOOLING stands for simultaneous peripheral operations on-line

56) Thrashing is the coincidence of high paging traffic and low CPU utilization.

57) _____ is a path under execution.

58) The OS maintains information about each process in a record called _____ .

59) _____ is a relation between number of page faults and number of page frames allocated to a process.

60) _____is the implementation method in case of MS-DOS for non-contiguous allocation.

61) _____ is a mechanism whereby the output of one process is directed into input of another process.

62) The time elapsed for position of Read/Write head under the desired sector is called _____ .

63) _____ , _____ are the two ways to achieve relocation and address translation.

64) The CPU utilization is low when the system is _____.

65) A space allocated in units of fixed size is called _____ .

66) A modified page is also called as _____ page.

67) _____is an example of shareable resource and _____ is an example for nonshareable resource.

68) _____ is forceful deallocationof a resource.

69) Unix is an example of _____ user system.

70) The _____ determines which process is to be executed next.

A process can change its state from block state to run state. Is this statement True or False? 1) Differentiate between the CPU bound process and I/O bound process.

2) Can we prevent deadlocks by denying mutual-exclusion condition? Justify your answer.
3) What do you mean by locality of reference?
4) What is a dirty bit? Why is it used?
5) What is the difference between circuit switching and packet switching?
6) Justify the statement :
7) "It is possible to support multiprogramming without using timesharing. However it is impractical to support timesharing without using multiprogramming"
8) "Swapping improves/degrades the efficiency of system utilization".
9) Describe the cause of READYÅ RUNNING transition.
10) What do you mean by "protection" incase of operating systems? How is it implemented?
11) What is Access Control List? Where is it used?
12) What is a deadlock? How does it occur?
13) What do you mean by scalability?
14) What is a capability list? Where is it used?
15) Comment on the statement:
16) "Interactive processes should have low/high priority"
17) Name secondary storage devices and explain where they are typically used.
18) Which type of scheduler controls the degree of multiprogramming?
19) What is a race condition?
20) Which condition(s) is/are very necessary for a deadlock. Justify your answer.
21) What do you mean by a "kernel"?
22) What do you mean by the "context" of a process?

23) Give one difference between a .COM file and .EXE file in DOS.
24) Name the necessary conditions for a deadlock.
25) What is a critical section?
26) What is IOCS? What are it functions?
27) Explain advantages of distributed operating systems:
28) Name different scheduling policies and explain.
29) Differentiate between the logical address space and physical address space.
30) Explain in brief what you mean by: 1.Multiprogramming 2.Multiprocessing.
31) Name the five typical file operations.
32) Draw a block diagram showing the process transitions.
33) Can we prevent deadlocks by denying mutual-exclusion condition? Justify your answer.
34) How many different types of files are possible on UNIX operating system ?
35) Name them.
36) What is demand paging?
37) Explain Distributed processing with the help of examples.
38) Differentiate between contiguous and non-contiguous memory allocation.
39) What Is deadlock? Give an example.

Explain the following:

1) Semaphores
2) Disk caching
3) Working set
4) Locality of reference
5) DMA
6) Non-preemptive OS

Long answer Questions:

1) Consider a memory with 4 page frames, assuming that pages of a process are referenced in the following order:
2) 4,3, 2,1,4,3,5,4,3,2,1,5,2.
3) Show, which would be better FIFO or LRU.
4) Considering the above reference string show how Belady's anomaly occurs in case of FIFO.
5) How is memory re-used?
6) With the help of an example show the mapping from virtual address space to physical address space in case of virtual memory.
7) List the fields of the FCB and explain their use.
8) What is the difference between thread, process and Task?
9) What is the critical section problem? How is it handled?
10) Which condition(s) is/are very necessary for a deadlock? Justify your answer.
11) Discuss the use of Active file tables.
12) What constitutes the environment of a process?
13) What do you mean by "static and dynamic binding"?

14) What do you mean by an Inode? Where is it used?
15) How can a deadlock be avoided? Explain.
16) Write in detail the methods of LRU implementation.
17) Explain State Transition Diagram.
18) What is Inter-process communication?
19) Define the terms: Thread; process; Context of a process.
20) Describe the PC architecture with a block diagram
21) Discuss the various issues involved in Process Management

Vidyanidhi Info Tech Academy

PG DAC Question Bank

1. DDE feature is supported by
a. IPC b. Hard Real Time System c. Microkernel d. None

2. A program that acts as an interface between process and OS is called
a. Kernel **b. System call** c. Microkernel d. Virtual Machine

3. The time sharing operating system is also called as
a. Multiprogramming **b. Multitasking** c. Both d. None

4. IPC is required in
a. Multiprocessing b. Single processing c. Both d. None

5. DDE stands for
a. Distributed Dynamic Exchange b. Dynamic Distributed Exchange
c. Distributed Data Exchange **d. Dynamic Data Exchange**

6. A PCB is created when a process is
a. Running b. Ready **c. Created** d. None

7. ISR stands for
a. Inter Service Routine **b. Interrupt Service Routine** c. Interrupt Set Routin d. Internal Service Routing

8. Inter process communication can be done through
a. Mails **b. Messages** c. System calls d. Traps

9. The operating system of a computer serves as a software interface between the user and the
a. **Hardware** b. Peripheral d. Memory **d. Screen**

10. A thread is a _____ process.
a. Heavy Weight b. Multiprocess c. Inter Thread **d. Light weight**

11. A process said to be in _____ state if it was waiting for an event that will never occur.
a. Safe b. Unsafe **c. Deadlock** d. All

12. The Hardware mechanism that enables a device to notify the CPU is called _____.
a. Polling **b. Interrupt** c. System Call d. None of the above

13. IPC stands for
a. Inner Process Communication b. Inter Process Call **c. Inter Process Communication** d. Intra Process Call

14. For non sharable resources like a printer, mutual exclusion :
a. must exist b. must not exist c. may exist d. None of these

15 .The request and release of resources are _____.
a. command line statements b. interrupts **c. system calls** d. special programs

16. A machine that acts as a virtual computer is called
a. Virtual Machine b. Virtual Environment c. Both d. None

17. Semaphores are used to solve the problem of
a. race condition b. process synchronization **c. mutual exclusion** d. belady problem

18. In which scheduling policies, context switching never takes place
a. FCFS b. round robin c. Shortest job first d. Pre-empitive

19. Which technique was introduced because a single job could not keep both the CPU and the I/O devices busy?
a. Time-sharing b. Spooling c. Preemptive scheduling **d. Multiprogramming**

20. Which of the following memory allocation scheme suffers from External fragmentation?
a. Segmentation b. Pure demand paging c. Swapping d. Paging

21. A major problem with priority scheduling is _____.
a. Definite blocking **b. Starvation** c. Low priority d. None of the above

22. A state is safe if
a. It removes deadlock b. It detects deadlock c. It avoids deadlock **d. None**

23. Banker's Algorithm is implemented to
a. Detect Deadlock b. Prevent Deadlock **c. Avoid Deadlock** d. All

24. The disadvantage of moving all process to one end of memory and all holes to the other direction, producing one large hole of available memory is :
a. the cost incurred b. the memory used c. the CPU used d. All of these

25. Semaphore is a/an _____ to solve the critical section problem.
a. hardware for a system b. special program for a system **c. integer variable** d. None of these

26. Virtual memory is normally implemented by _____.
a. demand paging b. buses c. virtualization d. All of these

27. When a thread needs to wait for an event it will
a. Block b. Execute c. Terminate d. Update

28. Paging increases the _____ time.
a. waiting b. execution **c. context – switch** d. All of these

29. Smaller page tables are implemented as a set of _____.
a. queues b. stacks c. counters d. **registers**

30. _____ is generally faster than _____ and _____.
a. **first fit, best fit, worst fit** b. best fit, first fit, worst fit c. worst fit, best fit, first fit d. None of these

31. The two steps of a process execution are : (choose two)
a. **I/O Burst** b. **CPU Burst** c. Memory Burst d. OS Burst

32. An I/O bound program will typically have :
a. a few very short CPU bursts b. many very short I/O bursts **c. many very short CPU bursts** d. a few very short I/O bursts

33. The operating system manages
a. Memory b. Processor c. Disk and I/O devices **d. All of the above**

34. The switching of the CPU from one process or thread to another is called :
a. process switch b. task switch c. context switch d. **All of these**

35. Dispatch latency is :
a. the speed of dispatching a process from running to the ready state
b. the time of dispatching a process from running to ready state and keeping the CPU idle
c. **the time to stop one process and start running another one**
d. None of these

36. A problem encountered in multitasking when a process is perpetually denied necessary resources is called
a. deadlock b. **starvation** c. inversion d. aging

37. A CPU bound program will typically have :
a. a few very short CPU bursts b. **many very short I/O bursts** c. many very short CPU bursts d. a few very short I/O bursts

38. Multithreaded programs are :
a. lesser prone to deadlocks b. **more prone to deadlocks** c. not at all prone to deadlocks d. None of these

39. To ensure that the hold and wait condition never occurs in the system, it must be ensured that :
a. whenever a resource is requested by a process, it is not holding any other resources
b. each process must request and be allocated all its resources before it begins its execution
c. a process can request resources only when it has none
d. **All of these**

40. The disadvantage of invoking the detection algorithm for every request is :
a. overhead of the detection algorithm due to consumption of memory
b. excessive time consumed in the request to be allocated memory
c. **considerable overhead in computation time**
d. All of these

41. A computer system has 6 tape drives, with 'n' processes competing for them. Each process may need 3 tape drives. The maximum value of 'n' for which the system is guaranteed to be deadlock free is :
a. **2** b. 3 c. 4 d. 1

42. A system has 3 processes sharing 4 resources. If each process needs a maximum of 2 units then, deadlock :
a. **can never occur** b. may occur c. has to occur d. None of these

43. 'm' processes share 'n' resources of the same type. The maximum need of each process doesn't exceed 'n' and the sum of all their maximum needs is always less than m+n. In this setup, deadlock :
a. **can never occur** b. may occur c. has to occur d. None of these

44. The two ways of aborting processes and eliminating deadlocks are : (choose all that apply)
a. **Abort all deadlocked processes** b. Abort all processes
c. **Abort one process at a time until the deadlock cycle is eliminated** d. All of these

45. Those processes should be aborted on occurrence of a deadlock, the termination of which :
a. is more time consuming b. **incurs minimum cost** c. safety is not hampered d. All of these

46. Cost factors of process termination include : (choose all that apply)
a. **number of resources the deadlock process is holding** **b. CPU utilization at the time of deadlock**
c. amount of time a deadlocked process has thus far consumed during its execution d. All of the above

47. If we preempt a resource from a process, the process cannot continue with its normal execution and it must be :
a. aborted **b. rolled back** c. terminated d. queued

48. To _____ to a safe state, the system needs to keep more information about the states of processes.
a. abort the process **b. roll back the process** c. queue the process d. None of these

49. If the resources are always preempted from the same process, _____ can occur.
a. deadlock b. system crash c. aging d. **starvation**

50. The solution to starvation is :
a. **the number of rollbacks must be included in the cost factor**
b. the number of resources must be included in resource preemption
c. resource preemption be done instead
d. All of these

51. The strategy of making processes that are logically runnable to be temporarily suspended is called :
a. Non preemptive scheduling b. **Preemptive scheduling** c. Shortest job first d. First come First served

52. Scheduling is :
a. allowing a job to use the processor b. making proper use of processor c. **Both i and ii** d. None of these

53. Which one of the following is not shared by threads?
a. program counter b. stack c. **both (i) and (ii)** d. none of the mentioned

54. When the event for which a thread is blocked occurs,
a. **thread moves to the ready queue** b. thread remains blocked c. thread completes d. a new thread is provided

55. The register context and stacks of a thread are deallocated when the thread
a. **terminates** b. blocks c. unblocks d. spawns

56. Thread synchronization is required because
a. all threads of a process share the same address space b. all threads of a process share the same global variables
c. all threads of a process can share the same files d. **all of the mentioned**

57. The kernel keeps track of the state of each task by using a data structure called __
a. **Process control block** b. User control block c. Memory control block d. None of the above

58. In the multi-programming environment, the main memory consisting of _____ number of process.
a. Greater than 100 b. Only one c. Greater than 50 d. **More than one**

59. Which of the following statement is not true?
a. Multiprogramming implies multitasking b. Multi-user does not imply multiprocessing
c. Multitasking does not imply multiprocessing d. **Multithreading implies multi-user**

60. Saving the state of the old process and loading the saved state of the new process is called _____.
a. **Context Switch** b. State c. Multi programming d. None of the above

61. Resource locking _____.
a. Allows multiple tasks to simultaneously use resource b. **Forces only one task to use any resource at any time**
c. Can easily cause a dead lock condition d. Is not used for disk drives

62. Operating system is
a. A collection of hardware components b. A collection of input output devices c. **A collection of software routines**
d. All of the above

63. Piece of code that only one thread can execute at a time is called
a. Mutual Exclusion **b. Critical Section** c. Synchronization d. All

64. I/O function allows to exchange data directly between an
a. Process States b. Registers **c. I/O module and processor** d. I/o devices

65. Memory of computer system for storing provides
a. array of characters b. array of alphabets **c. array of words** d. array of numbers

66. Processor-I/O involves data transferring between
a. Computers b. **Processor and I/O modules** **c.** Registers d. User Processes

67. Invalid memory access to computer system is a
a. trap **b.** program c. process d. interrupt

linux

1. The directory contains special files associated with input output devices such as terminals, line printer etc
a. /etc **b. /dev** c. /bin d. /device e. /mnt

2. The utility program that searches a file, or more than one file, for lines which contain strings of a certain pattern
a. Find **b. grep** c. tr d. locate e. pr f. search

3. The Block of every file system contains the major pieces of information about the file system such as file system name , number of blocks reserved for inodes , free inode list etc
a. Inode block **b. Super block** c. Boot block d. Data block

4. Unix OS was first developed at
a Microsoft Corp, USA **b. AT & T Bell Labs , USA** c. IBM , USA d. Borland Internationa, USA

5. Internal value associated with the standard error device.
a. 0 b. 1 **c. 2** d. 9 e. 3

6. A file may have more than one name. This is accomplished using which of the following commands?
a. dup **b. ln** c. named. fork e. cp

7. Which command displays all information about every system process?
a. ps b. ps -f **c. ps -ef** d. ps –a e. ps -u

8. Part of the system which manages the resources of computer system, keep track of the disks, tapes, printers, terminals, communication lines and any other devices.
a. Schedular **b. Kernel** c. Shell d. Resource manager e. System call

9. Chmod 754 on a file
a. allow group and other to read , write b. allow owner to only read
c. allow others to only read d. allow group to only execute

10. If your process refuses to die with kill command in the normal number, signal number option used is
a. 13 **b. 9** c. 3 d. 0 e. 99

11. When we are executing a shell script the shell acts as
a. An Interpreter b. A Compiler c. An Operating System d. None of the above

12. A null variable X can be created using

a. X= b. X=’’ c. X=”” **d. all the above**

13. init _____ halts the system

a. 1 **b. 0** c. h d. 5

14. What would the following file permissions mean “rwxr-xr—“?

a. Read, write and execute permission for everyone.

b. Read, write and execute permission for the file owner, read and execute permission for the group, and only read permission for all others.

c. The file owner is the only one who can execute the file.

d. People who do not own the file and are not in its group, can only run it. System and Network Administration-I

15. A hierarchical structure consisting of directories and files

a. Track b. cylinder c. partition **d. filesystem**

16. Which of the following is not a component of a user account?

a. home directory b. password c. group ID **d. kernel**

17. The redirection symbol for output is

a. > b. < c. ^ d. |

18. To find out a file’s inode number, use this option on the “ls” command.

a. -i b. -inode c. -inum d. -in

19. By default, “ps” command will list

a. All processes running of a current users in all terminals

b. **Only processes running in that terminal of the current users**

c. All processes for all users

d. Processes for other users only

20. Which of the following is not a major Unix shell?

a. C shell **b. WIN shell** c. bash shell d. Korn shell

21. The purpose of the PATH variable is to

a. Show the current directory

b. Show the directory path of a file

c. Tells the shell what directories to search when a command is entered

d. Tells the shell in which directories new file can be created

22. The run configuration file in Vi is called

a. cshrc b. virc c. bashrc d. exrc

23. Use the following command to save and exit from Vi.

a. ZZ b.:w c. :q! d. wq **e. Both a and d option**

24. Which of the following Unix utilities are not commonly used to process regular expressions?
a. grep b. sed **c. cut** d. awk

25. Which file controls the initialization process?
a. Fstab **b. inittab** c. sysconfigtab d. gettytab

26. Names are associated with the IP addresses, so that users do not have to remembers IP addresses, This association is the job of the
a. IPN **b. DNS** c. INS d. TCP e. IP

27. New users are added into this file.
a. /passwd b. /usr **c. /etc/passwd** d. /home

28. Passing information between programs is called.
a. Program intertalk b. Program communication
c. Interprocess communication d. Task communication

29. To make a variable available to any subshells you execute using command
a. Import b. global **c. export** d. set e. path

30. User request background execution of a program by placing what at the end of the command line
a. # b. @ **c. &** d. * e. !

31. With a umask value of 12, What are the default permissions assigned to newly created files?
a. --x—x-wx **b. -rw-rw-r—** c. -r-xr-xr— d. -rw-rw----

32. The tar command is used to
a. Print the contents of a file b. Reformatting a file before printing c. **Making archive tapes** d. Merging a file

33. Which one is not a characteristic of pipes
a. Connect commands b. Multiple pipes can be used on a command line
c. **Can create individual files for every process output** d. Can also be used with |tee symbol

34. Which command display the real name of the users who have currently logged on
a. Who **ii) finger** iii) talk iv) whoami v) users

35. To create a hidden file in unix system
a. Filename typed in upper case **b. First character of filename is. (dot)**
c. Filename containing # anywhere d. First character of filename is $.

36. The "nice" command is used to

a. Communicate with other users **b. Improve relationships** c. Change Priority levels of running processes
d. Create processes e. format a document so that its look nice

37. The letters TCP/IP stand for
a. Telecommunication Control Program/Internet Program **b. Transmission Control Protocol/Internet Protocol**
c. Teleprocessing Conversion Program/Internet Program d. None of the above

38. Which special variable contains the PID of its own process?
a. $job **b. $$** c. PID d. $ps

39. The process that needs to run in the background as a daemon to ensure that logging happens is:
a. telnetd b. syslogd c. fsck d. All of these

40. The minimum number of link for a directory is
a. 1 **b. 2** c. 6 d. 3 e. 5

41. Match the following:

1.Program in execution	1. fork (5)
2. Administrator account name in unix/linux	2. $@
3. To continue running process even if user logs out	3. fsck (6)
4. Command providing super user status	4. admin
5. System calls creating new processes	5. process (1)
6. Utility ensure integrity of the file system	6. ocat
7. repeating the last command in vi	7. root (2)
8. Shell environment variable storing number of Arguments	8. nohup (3)
9. displays data in octal format	9. fcheck
10.Write the memory information to the disk	10. .(dot) (7)
	sync (10)
	$# (8)
	13. od (9)

	14. su (4)

Q3. Answer the following:-
What is the difference between the two commands.
$ cat < fileone > filetwo 2> errorlst
$ cat > filetwo 2> errorlst < fileone

Ans: It's a same command , the order of redirection make no difference

What is the meaning of exit status value and how can we access the exit status value of any command
Ans: Exit status meaning the command return value to the environment indicating it is successfully executed or have error
Exit Status value is stored in environment variable $?

3) Differentiate between Relative path and Absolute path
Ans: Relative path is path relative to the current director, so its start with either. or directory name , Absolute or full path always start with / that is root so user can be in any directory it will direct to that path only

4) Write a command to substitute all occurrences of word "printf "with "cout" from a file myprog.c
Ans sed '1,$s/printf/cout/g' myprog.c

5) Explain the directories /bin, /dev and /mnt
Ans: /bin contains all binary executable file or user utility
/dev contains all device files of the system
/mnt is a directory for mounting devices

MCQ

1. What is operating system?
a. collection of programs that manages hardware resources
b. system service provider to the application programs
c. link to interface the hardware and application programs
d. all of the mentioned

2. To access the services of operating system, the interface is provided by the
a. system calls b. API c. library d. assembly instructions

3. Which one of the following is not true?
a. kernel is the program that constitutes the central core of the operating system
b. kernel is the first part of operating system to load into memory during booting
c. kernel is made of various modules which can not be loaded in running operating system
d. kernel remains in the memory during the entire computer session

4. The systems which allows only one process execution at a time, are called
a. uniprogramming systems b. uniprocessing systems c. unitasking systems d. none of the mentioned

5. What is the ready state of a process?
a. when process is scheduled to run after some execution b. when process is unable to run until some task has been completed
c. when process is using the CPU d. none of the mentioned

6. The number of processes completed per unit time is known as _____.
a. Output **b. Throughput** c. Efficiency d. Capacity

7. The state of a process is defined by :
a. the final activity of the process b. the activity just executed by the process
c. the activity to next be executed by the process **d. the current activity of the process**

8. Which of the following is not the state of a process?
a. New **b. Old** c. Waiting d. Running

9. The Process Control Block is:
a. Process type variable **b. Data Structure** c. a secondary storage section d. a Block in memory

10. The degree of multi-programming is
a. the number of processes executed per unit time b. the number of processes in the ready queue
c. the number of processes in the I/O queue **d. the number of processes in memory**

11. The objective of multi-programming is to: (choose two)
a. Have some process running at all times b. Have multiple programs waiting in a queue ready to run
c. To minimize CPU utilization **d. To maximize CPU utilization**

12. The processes that are residing in main memory and are ready and waiting to execute are kept on a list called
a. job queue **b. ready queue** c. execution queue d. process queue

13. The interval from the time of submission of a process to the time of completion is termed as
a. waiting time **b. turnaround time** c. response time d. throughput

14. Which scheduling algorithm allocates the CPU first to the process that requests the CPU first?
a. first-come, first-served scheduling b. shortest job scheduling c. priority scheduling d. none of the mentioned

15. Time quantum is defined in
a. shortest job scheduling algorithm **b. round robin scheduling algorithm** c. priority scheduling algorithm
d. multilevel queue scheduling algorithm
16. An interrupt breaks the execution of instructions and diverts its execution to
a. Interrupt service routine b. Counter word register c. Execution unit d. control unit

17. How does the processor respond to an occurrence of the interrupt?
a. By Interrupt Service Routine b. By Interrupt Status Routine c. By Interrupt Structure Routine d. By Interrupt System Routine

18. On getting, an interrupt, CPU
a. finishes the current instruction and moves to interrupt service routine
b. immediately moves to interrupt service routine without completing current instruction [
c. releases the control on I/O lines and memory lines
d. makes the peripheral device, which requested the interrupt wait for fixed interval of time

19. Round robin scheduling falls under the category of :
a. Non preemptive scheduling **b. Preemptive scheduling** c. Preemptive and Non-preemptive d. None of these

20. The portion of the process scheduler in an operating system that dispatches processes is concerned with
a. assigning ready processes to CPU b. assigning ready processes to waiting queue
c. assigning running processes to blocked queue d. All of these

21.The FIFO algorithm :
a. first executes the job that came in last in the queue **b. first executes the job that came in first in the queue**
c. first executes the job that needs minimal processor d. first executes the job that has maximum processor needs

22. Under multiprogramming, turnaround time for short jobs is usually _____ and that for long jobs is slightly _____.
a. Lengthened; Shortened **b. Shortened; Lengthened** c. Shortened; Shortened d. Shortened; Unchanged

23. The _____ swaps processes in and out of the memory.
a. memory manager unit b. CPU c. CPU manager d. user

24. Which one of the following is the address generated by CPU?
a. physical address b. absolute address **c. logical address** d. none of the mentioned

25. Memory management technique in which system stores and retrieves data from secondary storage for use in main memory is called
a. fragmentation **b. paging** c. none of the mentioned

26. Operating System maintains the page table for
a. each process b. each thread c. each instruction d. each address

27. The main memory accommodates: (Choose any two)
a. operating system b. CPU **c. user processes** d. All of these

28. In contiguous memory allocation :
a. each process is contained in a single contiguous section of memory
b. all processes are contained in a single contiguous section of memory
c. the memory space is contiguous d. None of these

29. When memory is divided into several fixed sized partitions, each partition may contain _____.
a. exactly one process b. atleast one process c. multiple processes at once d. None of these

30. In fixed sized partition, the degree of multiprogramming is bounded by _____.
a. the number of partitions b. the CPU utilization c. the memory size d. All of these

31. In internal fragmentation, memory is internal to a partition and
a. is being used **b. is not being used** c. is always used d. None of these

32. Solution to the problem of external fragmentation problem is to
a. permit the logical address space of a process to be noncontiguous
b. permit smaller processes to be allocated memory at last
c. permit larger processes to be allocated memory at last d. All of these

33. External fragmentation exists when
a. enough total memory exists to satisfy a request but it is not contiguous
b. the total memory is insufficient to satisfy a request
c. a request cannot be satisfied even when the total memory is free d. None of these

34. When the memory allocated to a process is slightly larger than the process, then
a. internal fragmentation occur b. external fragmentation occur c. both a and b d. neither a nor b

35. Physical memory is broken into fixed-sized blocks called _____.
a. frames b. pages c. backing store d. None of these

36. Logical memory is broken into blocks of the same size called _____.
a. frames **b. pages** c. backing store d. None of these

37. The size of a page is typically :
a. varied **b. power of 2** c. power of 4 d. None of these

38. Because of virtual memory, the memory can be shared among
a. processes b. threads c. instructions d. none of the mentioned

39. Swap space exists in
a. primary memory **b. secondary memory** c. CPU d. none of the mentioned

40. When a program tries to access a page that is mapped in address space but not loaded in physical memory, then
a. segmentation fault occurs b. fatal error occurs **c. page fault occurs** d. no error occurs

41. The operating system of a computer serves as a software interface between the user and the
a. **Hardware** b. Peripheral c. Memory d. Screen

42. The operating system manages
a. Memory b. Disk c. I/O devices d. **All of the above**

43. CPU Scheduling is the basis of _____ operating system
a. Batch b. Uniprogramming c. **Multiprogramming** **d.** Monoprogramming

44. CPU performance is measured through _____.
a. **Throughput** b. MHz c. Flaps d. None of the above

45. A Process Control Block contains:
a. Data b. PID c. Process state d. **All**

46. Process is
a. Program in high level language kept on disk b. Contents of main memory
c. A program in execution **d.** A program in secondary memory

47. Which among following scheduling algorithms give minimum average waiting time
a. FCFS b. **SJF** **c.** Round robin d. Priority

48. Paging _____.
a. **solves the memory fragmentation problem** b. allows modular programming
c. allows structured programming d. avoids deadlock

49. Virtual memory is _____.
a. An extremely large main memory b. An extremely large secondary memory
c. **An illusion of extremely large main memory** d. A type of memory used in super computers.

50. The two steps of a process execution are: (choose two)
a. **I/O Burst** **b. CPU Burst** c. Memory Burst d. OS Burst

51. An I/O bound process will typically have:
a. a few very short CPU bursts b. many very short I/O bursts **c. many very short CPU bursts**
d. a few very short I/O bursts

52. A process is selected from the _____ queue by the _____ scheduler, to be executed.
a. blocked, short term b. wait, long term c. **ready, short term** d. ready, long term

53. With round robin scheduling algorithm
a. **using very large time slices converts it into First come First served scheduling algorithm**
b. using very small time slices converts it into First come First served scheduling algorithm
c. using extremely small time slices increases performance
d. using very small time slices converts it into Shortest Job First algorithm

54. Scheduling is
a. allowing a job to use the processor b. making proper use of processor **c. Both a and b** d. None of these

55. Who is called a supervisor of computer activity?
a. Memory b. **Operating System** **c.** OCI/O Device d. Control Unit

56. The kernel keeps track of the state of each process by using a data structure called
a. **Process control block** b. User control block c. Memory control block d. None of the above

57. In the multi-programming environment, the main memory consisting of _____ number of process.
a. Greater than 100 b. Only one c. Greater than 50 **d. More than one**

58. _____ scheduler selects the jobs from the pool of jobs and loads into the ready queue.
a. **Long term** b. Short term c. Medium term d. None of the above

59. What is Thrashing?
a. A high paging activity **b.** A high executing activity c. An extremely long process d. An extremely long virtual memory

60. Poor response times are caused by
a. Busy processor b. High I/O rate c. High paging rates d. **Any of above**

61. If process is running currently executing, it is in running

a. Mode b. Process c. **State** **d.** Program

62. Microkernel architecture facilitates
a. Functionality b. **Extensibility** **c. Reliability** **d.** Portability

63. Privileged mode of operating system mode is a
a. user mode b. **kernel mode** **c.** system mode d. both b and c

64. An optimal scheduling algorithm in terms of minimizing the average waiting time of a given set of processes is _____.
a. FCFS scheduling algorithm b. Round robin scheduling algorithm **c. Shorest job - first scheduling algorithm**
d. None of the above

65. Which of the following memory allocation scheme suffers from External fragmentation?
a. Fixed Memory Partition **b. Dynamic Memory Partition** c. Paging d. None

66. Which of the following is crucial time while accessing data on the disk?
a. Seek time b. Rotational time c. Transmission time d. Waiting time

67. Paging _____.
a. solves the memory fragmentation problem b. allows modular programming c. allows structured programming
d. avoids deadlock

68. A program at the time of executing is called _____.
a. Dynamic program b. Static program c. Binded Program **d. A Process**

69. Using Priority Scheduling algorithm, find the average waiting time for the following set of processes given with their priorities in the order: Process : Burst Time : Priority respectively .
P1 : 10 : 3 ,
P2 : 1 : 1 ,
P3 : 2 : 4 ,
P4 : 1 : 5 ,
P5 : 5 : 2.
a. 8 milliseconds **b. 8.2 milliseconds** c. 7.75 milliseconds d. 3 milliseconds

70. A process is created and initially put in the
a. ready queue **b. job queue** c. I/O queue d. None

71. PCB =
a. Program Control Block **b. Process Control Block** c. Process Communication Block d. None of the above PCB

72. Round robin scheduling is essentially the preemptive version of _____.
a. FIFO b. Shortest job first c. Shortes remaining d. Longest time first

73. FIFO scheduling is _____.
a. Preemptive Scheduling **b. Non Preemptive Scheduling** c. Deadline Scheduling d. Fair share scheduling

74. In priority scheduling algorithm
a. CPU is allocated to the process with highest priority b. CPU is allocated to the process with lowest priority
c. equal priority processes can not be scheduled d. none of the mentioned

75. In priority scheduling algorithm, when a process arrives at the ready queue, its priority is compared with the priority of
a. all process **b. currently running process** c. parent process d. init process

76. Turnaround time is
a. the total waiting time for a process to finish execution
b. the total time spent in the ready queue
c. the total time spent in the running queue
d. the total time from the completion till the submission of a process

77. Waiting time is
a. the total time in the blocked and waiting queues
b. the total time spent in the ready queue
c. the total time spent in the running queue
d. the total time from the completion till the submission of a process

78. Scheduling is done so as to :
a. increase the waiting time b. keep the waiting time the same **c. decrease the waiting time** d. None of these

79. Response time is
a. the total time taken from the submission time till the completion time
b. the total time taken from the submission time till the first response is produced
c. the total time taken from submission time till the response is output
d. None of these

80. The FCFS algorithm is particularly troublesome for _____.
a. time sharing systems **b. multiprogramming systems** c. multiprocessor systems d. Operating systems

81. One of the disadvantages of the priority scheduling algorithm is that :
a. it schedules in a very complex manner b. its scheduling takes up a lot of time
c. it can lead to some low priority process waiting indefinitely for the CPU d. None of these

85. CPU scheduling decisions takes place under following conditions
a. When a process switches from running to ready state b. When a process switches from running state to waiting state
c. When a process terminates **d. All of the Above**

86. What is meant by throughput?
a. Number of processes running in the system **b. Number of process completed per unit time by the system**
c. Number of processes waiting for CPU per unit time d. None of the above

87. When CPU becomes idle which scheduler is called?
a. Short term scheduler b. Medium term scheduler c. Long term scheduler d. Any

88. What is a medium-term scheduler?
a. It selects which process has to be brought into the ready queue
b. It selects which process has to be executed next and allocates CPU
c. It selects which process to remove from memory by swapping
d. None of these

89. What is Turnaround time of a process?
a. Time spent in waiting queue **b. Time spent in ready queue + waiting queue + running state**

c. Time spent in ready queue + waiting queue d. Time spent in ready queue

90. Which scheduler selects which processes should be brought into the ready queue?
a. Real-term **b. Long-term** c. Medium-term d. Short-term

91. A page fault occurs
a. when the page is not in the memory b. when the page is in the memory
c. when the process enters the blocked state d. when the process is in the ready state

92. A CPU bound process will typically have
a. **many very long CPU bursts** b. many very short I/O bursts c. many very short CPU bursts d. **a few very short I/O bursts**

93. The chunks of a memory are known as
a. Sector b. Offset c. Page **d. Frame**

94. Which of the following concept is best to preventing page faults?
a. Paging **b. The working set** c. Hit ratio d. Address location resolution

95. Copying a process from memory to disk to allow space for other process is called
a. Swap out b. Deadlock c. Demand Paging d. Page fault

96. ..... is a large kernel containing virtually the complete operating system, including, scheduling, file system, device drivers and memory management.
a. Multilithic kernel **b. Monolithic kernel** c. Micro kernel d. Macro kernel

97. .10 A ..... architecture assigns only a few essential functions to the kernel, including address spaces, Inter process communication(IPC) and basic scheduling.
a. Monolithic kernel **b. Micro kernel** c. Macro kernel d. Mini kernel

98. With ..... only one process can execute at a time; meanwhile all other process are waiting for the processer. With ..... more than one process can be running simultaneously each on a different processer.

a. Multiprocessing, Multiprogramming b. Multiprogramming, Uniprocessing **c. Multiprogramming, Multiprocessing**
d. Uniprogramming, Multiprocessing

99. System call routines of operating system are mostly written in
a. C b. C++ c. java d. **both a and b**

100. How does the Hardware trigger an interrupt?
a. Sending signals to CPU through system bus b. Executing a special program called interrupt program
c. Executing a special program called system program d. Executing a special operation called system call

101. Which is not the function of the Operating system?
a. Memory management b. Disk management c. Application management **d. Virus protection**

O.S (1)

1. The page table entry contains_____

a. the information regarding given page is valid or not b. the information regarding given segment is valid or not

c. the information regarding given page table is valid or not **d. All of the above**

2. Binary Semaphores are used for _____

a. resource allocation b. critical sections **c. mutual exclusion** d. synchronization

3. Which CPU scheduling algorithm is non-preemptive type from the following?

a. Shortest job first scheduling b. Round robin scheduling

c. Priority based scheduling **d. First come first serve based scheduling**

4. What will be the possibility, when process comes in wait or block state?

a. disk operation b. time since expire

c. due to the higher priority process arrival **d. All of the above**

5. What is attenuation?

a. Noise of the cable **b. Loss of signal strength** c. Unwanted signals d. None of the above

6. What dispatcher does?

a. Select the process from the ready queue b. Run the process from the ready queue

c. Select and run the process from the ready queue d. None of the above

7. Which one is he correct statement regarding thread?

a. Logical extension of the process b. Very similar to the process

c. Threads have there own address space they do not use the process address space

d**. Threads share the same address space that is used by the process**

8. What linker does?

a. merging object files b. sorting text and data **c. resolve symbols across modules** d. All of the above

9. Which one is not a system call?

a**. excel** **b. execve** c. fork d. All of the above

10. Which statement is true for the deadlock?

a. It is very usual, when a process terminates, it became dead process and his lead to dead lock

b. Deadlock arises when a process try to access a non shareable resources

c. Deadlock arises when process is holding some more resources that are already hold by some other process and no one want to release their resources

d. Deadlock arises when we try to lock the process and the process is in running state that lock become a dead lock

11. By using interrupt which kind of problem will be eliminated?
a. Spooling **b. Polling** c. Job Scheduling d. None of the above

12. Copy-on-write concept is_____
a. applicable only for two unrelated processes b. used by the processes those created with the help of exec call
c. used by the any kind of process no restriction **d. used by the related processes**

13. What are the resources for the computer system?
a. CPU cycles b. System buses c. Operating system code an d data structure **d. All of the above**

14. Which statement is true from the following?
a. A safe state is a deadlock state always b. An unsafe state is a deadlock state always
c**. An unsafe state has a probability to be a deadlock state** d. All are tgrue

15. Virtual memory with paging mechanism (page-replacement technique) provides
a. runtime relocatability b. memory extension c. memory protection **d. All of the above**

16. With any Disk Scheduling Algorithms, Performance depends on_____
a. Number of requests b**. Number and types of requests** c. Types of requests d. None of the above

17. Which one is not a part of the kernel?
a. Memory management **b. Debuggers management** c. Interrupt Management d. Timer and clock management

18. How many processes can be active in a monitor at a time?
a. Any no of processes **b. Only one** c. Only two d. None of the above

19. A Hierarchical structure consisting of directories and files
a. Track b. cylinder c. partition **d. filesystem**

20. Which register is use for memory management?
a. base register b. bound register and stack pointe **c. base and bound registeruit** d. base and stack pointer register

21. The purpose of the PATH variable is to
a. Show the current directory b. Show the directory path of a file
c**. Tells the shell what directories to search when a command is entered**
d. Tells the shell in which directories new file can be created

22. Names are associated with the IP addresses, so that users do not have to remembers IP addresses, this association is the job of the
a. IPN **b. DNS** **c. INS** d. TCP e. IP

23. What is the use of the program counter register?
a. It points to the next program in the execution b**. It points to the next instruction statement in the program**

c. It points to the next block of code in the execution d. None of the above

24. A pointer is said _____ if the definition of the type to which it points to is not included in the current translation unit. A translation unit is the result of merging an implementation file with its headers and header file

a. This pointer **b. Opaque pointer** c. Function pointer d. Nested pointer

25. Which of the following stack operation could result as stack underflow/

a. is empty b**. pop** c. push d. Two or more of the above answers

26. User request background execution of a program by placing what at the end of the command line

a. # b. @ **c. &** d. * e. !

27. Which statement is true?

a. Cache memory is type of the nonvolatile memory b. RAM stands for reliable access memory

c**. Cache resides between main memory and CPU** d. Hard disk is made up of different layer of the RAM

28. During process execution, which state transaction, is not possible?

a. ready state to running state b. running state to block state **c. block state to terminate state** d. block state to ready state

29. The tar command is used to

a. Print the contents of a file b. Reformatting a file before printing **c. Making archive tapes** d. Merging a file

30. Which command display the real name of the users who have currently logged on

a**. Who** b. finger c. talk d. whoami e. users

31. What is process control block?

a. It is data structure that represents the process

b. It is a data structure, which is part of the user space, and it represents the process

c**. It is a data structure, which is part of the kernel space, and it represents the process**

d. It is not a data structure which can be in virtual address space it represent the process

32. Paging leads to _____

a**. Internal fragmentations** b. External fragmentations c. Both 1 & 2 d. All of the above

33. The minimum number of link for a directory is

a. 1 **b. 2** c. 6 d. 3 e. 5

34. Internal Value associated with the standard error device

a. 0 b. 1 c. 2 d. 9 e. 3

35. Which of the following is not a component of a user account?

a. home directory b. password c. group ID **d. kernel (*)**

36. The redirection symbol for output is
a. **>** b. < c. ^ d. |

37. Which of the following is not a major Unix shell?
a. C shell **b. WIN shell** c. bash shell d. Korn shell

38. Which of the following Unix utilities are not commonly used to process regular expressions?
a. grep b. sed **c. cut** d. awk

39. New users are added into this file
a. /passwd b. /usr **c. /etc/passwd** d. /home

40. The tar command is used
a. Print the contents of a file b. Reformatting a file before printing c**. Making archive tapes** d. erging a file

OPERATING SYSTEM CONCEPTS

1. Which command will be used to display the current user id and name?
a. Who b. Which c. Who am i d. where is

2. As an abstraction, what operations apply to processes?
a. create b. exit c. status **d. All of the above**

3. Which command allow you to determine if a host is connected to the internet?
a. cmd b. Is-Ia **c. ping** d. pwd

4. Computer that handles concurrent users and multiple jobs are called_____
a. Client b. Network Client **c. Network servers** d. All of the above

5. Which of the following make up DOS?
a. Boot files b. File Management files c. Utility files **d. All of the above**

6. The file assign4.html has permissions to set as r w x r w x r w x
a. The file is really a directory and was named incorrectly **b. Everyone can read, write, and execute the file**
c. It is impossible for a html file to have permissions set that way d. The file can not be viewed on the WWW

7. Which of the following is true for DLLs?
a. DLLs don't get loaded in to random access memory together with the main program
b. A DLL helps promote developing modular programs

c. Both 1 and 2 d. None of the above

8. On a single processor multi-threading generally occurs by _____-
a. Time division multiplexing b. Multi processing **c. Context switching** d. None of the above

9. The ability of an Operating System to execute different parts of a program simultaneously is known as _____
a. Multi - Tasking b. Multi programming **c. Multi – Threading** d. Multi – scheduling

10. Which of the following is main objective of Disk Scheduling?
a. To minimize seek time b. To maximize turnaround time c. To minimize throughout d. To maximize bandwidth

11. In which of the following condition deadlock will occur?
a. Mutual wait; hold and wait; pre-emption; circular wait b. Mutual exclusion; hold and no wait; pre-emption; circular wait
c. Mutual exclusion; hold and wait, pre-emption; circular wait d. Mutual exclusion; hold and wait; non pre-emption ; circular wait

12. Which command will be used to display what date is it this Friday?
a. Date-fri b. Date-d fri c. Cal-d fri d. None of the above

13. Which command will be used to print selected parts of lines from each FILE to standard output?
a. Cut [option]…[FILE]… b. Print [option]…[FILE]… c. Cmp [option]…[FILE]… d. Comm. [option]…[FILE]…

14. Multiplexing of a single physical resource involves_____
a. Combining resources based on time b. Combining resources based on space
c. Dividing the resource based on time or space d. All of the above

15. When the processor is in user mode, all addresses are _____
a. Physical address b. Logical address c. Absolute address d. Memory address

16. What is an interrupt?
a. It is an immediate transfer of control caused by an event in the system
b. Some interrupts can only occur when bit 1 of the psw register is 1
c. Both 1 & 2 d. None of the above

17. Plan ahead so that you never get into a situation where deadlock is inevitable is called as _____
a. Deadlock prevention b. Deadlock avoidance c. Deadlock recovery d. Avoiding Mutual exclusion

18. In which situation a process is prevented from proceeding because some other process always has the resources it needs?
a. Locking b. Deadlock c. Starvation d. Blocking

19. Which of the following statement is false?
a. A smaller page size leads to smaller page tables b. A smaller page size leads to move TLB misses
c. A smaller page size leads to fewer page faults d. A smaller page size reduces paging I/O throughout

20. Anything that can be used by only a single process at any instant in time is called as _____

a. Memory b. Thread c. Space d. Resources

21. _____ determines which process gets CPU and when

a. Dispatcher b. Scheduler c. Allocator d. Process allocator

22. Which method is used to eliminate fragmentation after it occurs?

a. Compaction b. Segmentation c. Paging **d. All of the above**

23. Which method is used by memory to improve disk performance is used?

a. Disk Scheduling b. Disk caching c. Both 1 & 2 d. None of the above

24. When paging technique be used?

a. It is a solution to external fragmentation problem b. It is used to allow a process to be allocating

c. Both 1 & 2 d. None of the above

25. Which method is used by a program to make request to operating system?

a. System call b. CPU call c. Memory Management d. Interrupt call

26. The ability of a computer, machine, electronic system or network to maintain limited functionality even when a large portion of it has been destroyed or rendered is called as _____

a. Fault tolerance b. Fault Management **c. Graceful degradation** d. Denial of services

27. Memory allocation _____

a. is a process involves specification of memory addresses to its instructions and data

b. is an aspect of a more general action known as binding

c. Both 1 & 2 d. None of the above

28. Which type of binding perform before the operation of a program begins?

a. Static binding b. Dynamic binding c. Synchronous binding d. Asynchronous binding

29. Which of the following statement is true for dynamic allocation?

a. Allocation is performed during execution of a program b. Allocation exactly equals data size

c. No wastage of memory **d. All of the above**

30. Pre-emptive scheduling is used to temporally suspending a running process_____

a. To allow starving processes to run b. Before the CPU time slice expires **c. When it requests I/O** d. When interrupt occurs

31. The memory allocated to a process contains _____

a. Code and non static data of the program to be executed b. Stack c. Program controlled by dynamic data

d. All of the above

32. Which of the following mode is performing I/O operations?
a. Interrupt mode b. Running mode c. Memory access mode d. Safe mode

33. When a process terminates and all it's child process must also be termed this situation is called as ___
a. Child termination b. Child parent termination c. Spawn termination **d. Cascading termination**

34. Which of the following register contains address of the next instruction to be executed by the CPU?
a. Program counter register b. CPU registers c. Control register d. Condition code register

35. When an interrupt arises during its execution and the scheduler selects some other program for execution is called as _____
a. Preemption b. Non Preemption c. Priority d. Interrupt Processing

36. Page-replacement technique provides_____
a. Memory contraction b. Compile time relocability c. Memory protection d. None of the above

37. Swap space resides in _____
a. SRAM b. DRAM c. Processor **d. Disk**

38. Which of the following policy is used by Linux for page replacement?
a. LRU b. Optimal c. FIFO d. MRU

39. Which of the following statement is false?
a. Dirty buffers in the disk cache are written to the cache when the cache is too full
b. Each buffer in the cache has not a buffer header that is allocated in a slab of the slab allocator
c. The vnode data structure of the virtual file system contains pointers to device-specific functions

40. A process sends data to another process and the sender does not wait till the data is received by the receiver. This type of transfer is known as _____
a. Synchronous **b. Asynchronous** c. Blocking d. None of the above

41. Which command would yu use to create a sub-director in your home directory?
a. mkdir b. dir c. cp d. rm

42. Which command will display a calendar?
a. calendar **b. cal** c. dis cal d. view cal

43. The interval between submission of a request and the first response to that request is called as _____
a. Turnaround time b. Time delay **c. Response time** d. Request time

44. A unique number is used to look up an entry in the inode table which gives information on the type, size and location of the file is called as _____
a. Inode value b. Inode c. Inode number **d. All of the above**

45. Which of the following controls the degree of multi programming?
a. Long term scheduler b. Short term scheduler c. Both 1 & 2 d. None of the above

46. How can you view the permission-settings on all files in the current directory?
a. displayall **b. Is-l** c. listall d. listdir

47. Which command sends file content to standard output and list the content of short files to the screen?
a. echo b. cp **c. cat** d. None of the above

48. Which of the following statement is false?
a. Virtual memory is used only in multi-user systems b. Segmentation suffers from external fragmentation
c. Paging suffers from internal fragmentation d. Segmentation memory can be paged

49. In which scenario the First-Come, First-Served scheduling policy, I/O bound processes may have to wait long in the ready queue waiting for a CPU bound job to finish?
a. Aging **b. Priority inversion** c. Priority Inheritance d. Convoy effect

50. How can we determined the minimum number of page frames that must be allocated to a running process in a virtual memory environment?
a. the instruction set architecture b. page size c. number of processes in memory d. physical memory size

Operating System Principles

1. Bootstrap loader is _____
a. A program, which resides in the user space **b. A program, which resides in ROM**
c. A program, which resides in the RAM d. A program, which is a module of the kernel space

2. The page table entry contains_____
a. the information regarding given page is valid or not b. the information regarding given segment is valid or not
c. the information regarding given page table is valid or not **d. All of the above**

3. POSIX pthread library implementation in Linux schedules_____
a. user threads without the help of the kernel b. user threads with the help of light weight process
b. user threads with the help of kernel d. user threads with the help of heavy weight

4. Segmentations leads to _____
a. External fragmentation b. Internal fragmentation c. Both 1 and 2 d. all of the above

5. Binary Semaphores are used for _____
a. resource allocation b. critical sections **c. mutual exclusion** d. synchronization

6. Which CPU scheduling algorithm is non-preemptive type from the following?
a. Shortest job first scheduling b. Round robin scheduling
c. Priority based scheduling **d. First come first serve based scheduling**

7. What will be the possibility, when process comes in wait or block state?
a. disk operation b. time since expire c. due to the higher priority process arrival **d. All of the above**

8. What is attenuation?
a. Noise of the cable **b. Loss of signal strength** c. Unwanted signals d. None of the above

9. What is the fundamental scheduling block for operating system?
a. Kernel thread b. Process Control Block (PCB) c. Light Weight Process d. User thread

10. What dispatcher does?
a. Select the process from the ready queue b. Run the process from the ready queue
c. Select and run the process from the ready queue d. None of the above

11. Which one is he correct statement regarding thread?
a. Logical extension of the process b. Very similar to the process
c. Threads have there own address space they do not use the process address space
d. Threads share the same address space that is used by the process

12. Which inter processes Communication mechanism is fastest to exchange the data between processes?
a. PIPE b. FIFO **c. Shared Memory** d. Message Queue

13. What linker does?
a. merging object files b. sorting text and data c. resolve symbols across modules d. All of the above

14. Which one is not a system call?
a. excel b. Execve c. Fork d. All of the above

15. What is the use of the program counter register?
a. It points to the next program counter register b. It points to the next instruction statement in the progr
c. It points to the next block of code in the execution d. None of the above

16. What ping command does?
a. It sends ICMP ECHO_REQUEST to network hosts b. It sends ICMP ECHO_REQUEST to network servers only
c. It sends ICMP non ECHO_REQUEST to network host d. It sends ICMP non ECHO_REQUEST to network severs only

17. Paging leads to _____
a. Internal fragmentations b. External fragmentations c. Both 1 & 2 d. All of the above

18. How can we find out the free space size to use on Linux System hard disk partition?
a. df-hs b. freedisk-hs **c. fdisk-hs** d. None of the above

19. How can we get the information about the CPU on the Linux system?
a. cat /usr/cpuinfo **b. cat /proc/cpuinfo** c. cat /root/proc/cpuinfo d. cat /root/usr/cpuinfo

20. Loader is use to _____
a. load the kernel from harddisk to main memory **b. load the appropriate program into the main memory**
c. create the process and load in to the main memory
d. just make the program ready to load and loading in to memory is done by another Process

21. Which statement is true for the deadlock?
a. It is very usual, when a process terminates, it became dead process and his lead to dead lock
b. Deadlock arises when a process try to access a non shareable resources
c. Deadlock arises when process is holding some more resources that are already hold by some other process and no one want to release their resources
d. Deadlock arises when we try to lock the process and the process is in running state that lock become a dead lock

22. What is process control block?
a. It is data structure that represents the process
b. It is a data structure, which is part of the user space, and it represents the process
c. It is a data structure, which is part of the kernel space, and it represents the process
d. It is not a data structure which can be in virtual address space it represent the process

23. By using interrupt which kind of problem will be eliminated?
a. Spooling **b. Polling** c. Job Scheduling d. None of the above

24. Where the main system message log file information get stored?
a. /var/log/message b. /usr/log/message c. /src/log/message d. /root/log/message

25. Which command can be use on Linux platform to shutdown the system?
a. shutdown-r now b. Shutdown c. init 0 d. init 6

26. What type of file system Linux is using?
a. FAT-32 b. NTFS c. LFS d. Ext3

27. What is the kernel architecture for Linux?
a. Micro kernel b. Macro kernel c. Monolithic kernel d. Hybrid kernel

28. Virtual memory with paging mechanism (page-replacement technique) provides
a. runtime relocatability b. memory extension c. memory protection d. All of the above

29. What happens when a page fault occur for a valid legal virtual address?
a. Process will terminate b. Process will block c. None of the above
d. The process will restart after the page is brought to the main memory and page table entry will

30. Copy-on-write concept is_____
a. applicable only for two unrelated processes b. used by the processes those created with the help of exec cal
c. used by the any kind of process no restriction **d. used by the related processes**

31. What are the resources for the computer system?
a. CPU cycles b. System buses c. Operating system code an d data structure d. All of the above

32. Which statement is true from the following?
a. A safe state is a deadlock state always b. An unsafe state is a deadlock state always
c. An unsafe state has a probability to be a deadlock state d. All are true

33. Which command can be use on Linux platform to shutdown the system?
a. shutdown- r now b. Shutdown c. init 0 d. init 6

34. Virtual memory with paging mechanism (page-replacement technique) provides
a. runtime relocatability b. memory extension c. memory protection **d. All of the above**

35. Which of the following stack operation could result as stack underflow? 1
a. is_empty b. Pop c. Push d. Two or more of the above answers

36. With any Disk Scheduling Algorithms, Performance depends on_____
a. Number of requests b. Number and types of requests c. Types of requests d. None of the above

37. How can we find out the free space size to use Linux system hard disk partition?
a. df-hs b. freedisk-hs **c. fdisk-hs** d. None of the above

38. _____ means that the data added by a subclass are discarded when an object of the subclass is passed or returned by value or from a function expecting a base class object?
a. Slicing b. Up casting c. Down Casting d. Name Mangling

39. Which one is not a part of the kernel?
a. Memory management b. Debuggers management c. Interrupt Management d. Timer and clock management

40. Which CPU scheduling algorithm is non- preemptive type from the following?
a. Shortest job first scheduling b. Round robin scheduling c. Priority based scheduling
d. First come first serve based scheduling

41. How many processes can be active in a monitor at a time?
a. Any no of processes b. Only one c. Only two d. None of the above

42. Which register is use for memory management?
a. base register b. bound register and stack pointer c. base and bound registeruit d. base and stack pointer register

43. Which system call will you use to get the parent of the process?
a. getp() b. getppid() c. getparentid() d. None of the above

44. What are the resources for the computer system?
a. CPU cycles b. System buses c. Operating system code and data structure d. All of the above

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46. What is the use of the program counter register?
a. It points to the next program in the execution b. It points to the next instruction statement in the program
c. It points to the next block of code in the execution d. None of the above

47. A pointer is said _____ if the definition of the type to which it points to is not included in the current translation unit. A translation unit is the result of merging an implementation file with all its headers and header files
a. This pointer b. Opaque pointer c. Function pointer d. Nested pointer

48. _____ means that the data added by a subclass are discarded when an object of the subclass is passed or returned by value or from a function expecting a base class object?
a. Slicing b. Up casting c. Down Castingd. Name mangling

49. Which statement is false?
a. Spanning tree is a tree associated with a network
b. A minimum spanning tree is a spanning tree organized so that the total edge weight between nodes is minimized
c. Minimum spanning tree of a graph gives the shortest distance between any 2 specified nodes
d. None of the above

50. Which of the following stack operation could result as stack underflow/
a. is_empty b. pop c. push d. Two or more of the above answers

51. An array is having 12 elements, what will be the maximum number of comparisons that
a. 144 b. 12 c. 11 d. 13

52. Normally, when a hardware interrupt occur
a. mode switch and context-saving occur b. context-switch and context-saving occur
c. Both 1 & 2 d. None of the above

53. What happens when a page fault occur for an invalid_illegal virtual address?

a. Process will terminate b. Process will block c. All of the above
d. The process will restart after the page is brought to the main memory and page table entry will update.

54. _____signal generate when we try to access the illegal memory location using invalid pointer
a. SIGSTOP b. SIGSEGV c. SIGTERM d. SIGNULL

55. An array is having 12 elements, what will be the maximum number of comparisons that required in Merge sort?
a.144 b. 11 c. 12 d. 13

56. Which statement is true from the following?
a. A safe state is a deadlock state always b. An unsafe state is a deadlock state always
c. An unsafe state has a probability to be a deadlock state d. All are true

57. If a program that analyses an airline's ticketing transactions runs into an error, it should__
a. write the exceptions into a file and continue analysing transactions b. display an error message and halt processing
c. delete the record containing an error d. terminate the program

58. inode number represents_____
a. the directory on the file system uniquely **b. all types of files on the file system uniquely**
c. all process running on the system d. use of the code in the file system

59. Which statement is true?
a. Cache memory is type of the nonvolatile memory b. RAM stands for reliable access memory
c**. Cache resides between main memory and CPU** d. Hard disk is made up of different layer of the RAM

60. During process execution, which state transaction, is not possible?
a. ready state to running state b. running state to block state c. block state to terminate state
d. block state to ready state

70. Which of the following is a false statement about binary tree?
a. Every binary tree has at least one node b. Every non-empty tree has exactly one root node
c. Every node has at most two children d. Every non-root node has exactly one parent

71. Drivers constitute which part of the Linux Operating System?
a. Kernel b. Shell c. Applications d. GUI

72. Which is the default shell used by the Linux OS?
a. KSH b. BASH c. SSH d. ASH

73. Which command will list out all files including hidden files?
a. ls -l b. ls –A c. ls -r d. ls -a

74. To copy a directory instead of a file which switch is used in cp?

a. -a b. –v c. -R d. -c

74. Which one of the following uses a relative path?
a. /root b. /var/lib/ c. /home/student d. /scripts

75. How does a user find out which directory he is currently working in?
a. cwd b. mv **c. pwd** d. ls

76. Which command is used to rename a file?
a. ren b. cp **c. mv** d. none of the above

77. Which command is used to remove an empty directory?
a. del b. rm –R c. rm **d. rmdir**

78. Which of the following commands is correct?
a. more emp.db | cut -f 3 b. | cut -f 3 -d " " c. more emp.db > cut -f 3 -d " " d. more emp.db > cut -f 3

79. The touch command updates what?
a. modification time and access time b. access time only c. modification time only d. none of the above

80. Which command creates an archive and compresses it as well?
a. tar b. zip c. gzip d. none of the above

81. The command to change the ownership is
a. chgrp b. chmod c. takeown **d. none of the above**

82. chgrp does what?
a. Changes the owner b. Creates a new group c. Changes the access rights **d. none of the above**

83. chmod does what?
a. updates the mode of the file **b. changes the access rights** c. updates the access time of the file d. none of the above

84. How can read, write, execute (rwx) permission be represented in numeric form?
a. 0 **b. 7** c. 5 d. 8

85. Which command is used only to save a file in vi editor?
a.:wq b. :q c. :qa! **D. none of the above(:w)**

86. Which command is used to copy a block of text in vi editor?
a. y b. w c. p **d. none of the above(yy)**

87. Which command is used to start marking lines in vi editor?

a. ALT + v b. CTRL + v c. SHIFT + v **d. none of the above**

88. Which command is used to start marking a region in vi editor?
a. ALT + v **b. CTRL + v** c. SHIFT + v d. none of the above

89. Which should be the first line in every BASH (shell) script?
a. !#/bin/bash b. /bin/bash **c. #!/bin/bash** d. none of the above

90. Which of the following is a positional parameter?
a. &0 **b. $0** c. @0 d. none of the above

91. Which of the following arithmetic expression is correct?
a. $i=((i+1)) b. i=((i+1)) c. i=$((i+1)) **d. none of the above**

92. Which is a valid statement in a shell script?
a. echo "My name is $name" b. 122=I c. $i=13 d. none of the above

93. Which is NOT a valid statement in a shell script?
a. echo b. 122=I c. i=147 d. none of the above

94. Which command can be used to modify the color of the text which appears on screen?
a. echo b. color c. tput d. none of the above

95. The if construct always ends with?
a. end if b. stop c. if **d. none of the above(fi)**

96. The else part of the if construct ends with?
a. end else b. stop c. esle **d. none of the above(fi)**

97. While testing an integer variable what does -lt indicate?
a. last **b. less than** c. last value d) none of the above

98. Which is a valid variable name in a shell script?
a.123var b. var* c. $var **d. none of the above**

99. Which is a valid I/O redirection command?
a. more file.txt > /dev/null b. more file.txt c. more file.txt <> cat d. none of the above

100. User space and kernel space are defined by:
a. Kernel b. Hardware-CPU c. Both 1 & 2 d. Administrator

101. With any Disk Scheduling Algorithms, Performance depends on_____
a. Number of requests b. Number and types of requests c. Types of requests d. None of the above

102. Which one is not a part of the kernel?
a. Memory management b**. Debuggers management** **c**. Interrupt Management d. Timer and clock management

103. How many processes can be active in a monitor at a time?
a**. Any no of processes** b. Only one c. Only two d. None of the above

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a. base register b. bound register and stack pointer c. base and bound registeruit
d. base and stack pointer register

105. Which system call will you use to get the parent of the process?
a. getp() b. getppid() c. getparentid() d. None of the above

106. Conventional RTOS uses_____
a. only kernel space b. only user space c. may be user space and kernel space d. None of the above

107. Which statement is true?
a. Cache memory is type of the nonvolatile memory b. RAM stands for reliable access memory
c. Cache resides between main memory and CPU d. Hard disk is made up of different layer of the RAM

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a. Process will terminate b. Process will block c. All of the above
d. The process will restart after the page is brought to the main memory and page table entry will update.

Operating Systems Concepts

1. Which CPU scheduling algorithm is the Preemptive scheduling?
a. First Come First serve (FCFS) b. Round Robin (RR) c. Both d. None of the above.

2. Which CPU scheduling algorithm may suffer from the Starvation Problem
a. Round Robin (RR) b. First Come First serve (FCFS) c. Priority scheduling d. None of the above.

3. A Multithreaded programming Benefits
a. Increase Responsiveness to user. b. Utilization of multiprocessor architecture.
c. Resource Sharing d. All of above

4. Circular waiting is

a. not a necessary condition for deadlock
b. a necessary condition for deadlock, but not a sufficient condition.
c. a sufficient condition d. None of the above.

5. In an operating system using paging , if each 32-bit address is viewed as a 20-bit page identifier plus a 12-bit offset, what is the size of each page?
a. 2^12 =4096 bytes b. 2^20 bytes c. 20 byte d. None of the above.

6. Advantage of memory management using virtual memory
a. More Process can be loaded in the momery, to try to keep the processor busy
b. A process whose image larger than memory can be executed
c. Both 1 & 2 d. None of the above.

7. Following is not a Disk scheduling algorithm:
a. First Come First serve (FCFS) b. Round Robin c. SCAN d. LOOK

8. Which of the following condition is necessary for the deadlock
a. Mutual exclusion and Hold-and-wait b. No preemption and circular wait
c. Both 1 & 2 d. None of the above.

9. LOOK disk scheduling algorithm:
a. Select the request with minimum seek time from current head position.
b. Moves the head from one end of the disk to other end, servicing request along the way.
c. Moves the head only as far as the final request in each direction, then it reverse direction immediately, without first going all the way to the end of the disk.
d. None of the above.

10. Thrashing is:
a. CPU scheduling algorithm b. disk-scheduling algorithm c. High Paging Activity d. None of the above.

11. Spooling
a. In spooling, a process writes its output to a temporary file rather than to an output device, such as a printer
b. In spooling, a process writes its output to an output device, such as a printer
c. Both 1 & 2
d. None of the above.

12. A “critical section” of code is
a. A section that is executed very often, and therefore should be written to run very efficiently.
b. A section of the program that must not be interrupted by the scheduler.
c. A section of the program that is susceptible to race conditions, unless mutual exclusion is enforced.
d. A section of the code executed in kernel mode

13. The OS uses a round robin scheduler. The FIFO queue of ready processes holds three processes

A, B, C in that order. The time quantum is 18 msec. A context switch takes 2 msec. After running for 13 msec, B will block to do a disk read, which will take 30 msec to complete. Trace what will happen over the first 100 msec. What is the CPU efficiency over the first 100 msec?

a.80% b.70% c.90% 4.100%

14. "Time Quantum" in Round Robin Scheduling algorithm:
a. Time between the submission and completion of a process.
b. Time for the disk arm to move to the desired cylinder
c. Maximum time a process may run before being preempted
d. Time required to switch from one running process to another

15. An OS uses a paging system with 1Kbyte pages. A given process uses a virtual address space Of 128K and is assigned 16K of physical memory. How many entries does its page table contain?

a. 1024 b. 128 c. 512 d. 64

16. What is the "turnaround time" in scheduling algorithms?
a. Time for a user to get a reaction to his/her input.
b. Time between the submission and completion of a process
c. Time required to switch from one running process to another
d. Delay between the time that a process blocks and the time that it unblocks

17. "chmod " command in Linux
a. Change the operating system mode b. Change the command mode c. Change Access mode of file
d. None of the above.

18. "grep" Command is used
a. make each column in a document in a separate file b. combine a file and write them into a temp file
c. search a file for lines containing a given format. d. None of the above.

19. A program which is loaded into memory & is executing is commonly referred to as a:
a. Software. b. Job. c. Process. d. Program

20. Bankers Algorithm is used for:
a. Deadlock Characterization b. Deadlock Handling c. Deadlock avoidance d. Deadlock Detection

21. To enable a process to be larger than amount of memory allocated, we use:
a. TLB. b. Fragmentation. c. Overlays. d. None of the above.

22. A _____ is a memory area that stores data while they are transferred between 2 devices:
a. Spool b. Buffer c. Cache d. Kernel

23. The command used to display long listing of file is:
a. ls –l b. ls –a c. ls –t d. ls –r

24. The _____ file stores information about file systems that are mountable during booting:
a. /lib b. /mnt c. /etc/fstab d. /usr/local

25. In Linux ____ command is used to change the current working directory & ____ command is Used to print the current working directory on the screen:
a. cd, pwd b. pwd, cd c. cd, cp d. cp, cd

26. _____ Is a special user who has ultimate privilege on Linux system:
a. Any user b. Super user c. Administrator d. None of the above

27. In Linux, we can display the content of text file by using the command:
a. display b. show c. cat d. All of the above

28. Which command is used to change the group of a file?
a. change group b. chgrp c. changep d. None of the above

29. If more than one process is blocked, the swapper chooses a process with the _____
a. Lowest Priority. b. Highest Priority. c. Medium priority d. No Priority.

30. In Batch processing system the memory allocator are also called as _____
a. Long – term scheduler b. Short – term scheduler c. Medium – term scheduler d. Batch – term scheduler.

31. Wait until the desired sector of a disk comes under the R/W head as the disk rotates. This time Is called as _____
a. seek time b. latency time c. transmission time d. Read/Write time

32. All other processes wanting to enter their respective critical regions are kept waiting in a queue called as _____.
a. Ready queue. b. Waiting queue c. Semaphore queue. d. Critical queue.

33. There would be some time lost in turning attention from process 1 to process 2 is called as _____
a. Process transferring. b. Process switching c. Process turning. d. Context switching

34. Some operating system follows the technique of _____ in which you skip two sector and then number the sector (eg After starting from 0,you skip two sector and then number the sector as 1 and so on…)
a. Leaving. b. Skipping. c. Interleaving. d. Jumping

35. An alternative to the scheme of DMA is called _____.
a. Programmed I/O. b. Mapped I/O. c. I/O Mapped I/o d. I/O Controller

36. The kernel has to keep track of all the pages frames in terms of whether they are free, and if not, the process to which they are allocated. This is done by maintaining another data structure called _____.
a. Page Map Table (PMT). b. Page Frame Data Table (PFDT). c. Page Table Entry (PTE). d. Disk Block Descriptor (DBD).

37. _____ processes tend to be faster, since they do not have to go to the kernel for every Rescheduling (Context switching).
a. heavyweight processes. b. Lightweight processes. c. Kernel processes. d. System processes

38. To know the name of the Shell program we use following command (Bourne Shell).
a. $0 b. $1 c. $2 d. $9

39. To hold the exit status of the previous command _____ command is used.
a. $$ b. $? 3. $/ 4. $

40. To know the Process id of the current process _____ command is used.
a. $$ b. $? c. $/ d. $

41. To know the path of the Shell ____ command is used.
a. PATH b. CDPATH c. SHELL d. PS1

42. To print a file in Linux which command is used
a. print b. ls –p c. lpr d. None

43. To create an additional link to an existing file, which command is used
a. ln b. sbln c. cp d. none

44. The Linux command “cp ch? book”
a. Copies all files starting with ch to the directory book
b. Copies all files with three-character names and starting with ch to the directory book
c. Compress whether a file starting with ch exists in the directory book
d. None of the above

45. Command used in shell to read a line of data from terminals
a. rline b. line c. lread d. None of these

46. In vi, to change a word in command mode, one has to type
a. cw b. wc c. lw d. none

47. What would be the output of the following shell script?

```
foo=10
x=foo
eval y='$'$x
echo $y
```

a. foo b. 10 c. x d. $x

48. In the following shell script

```
echo "Enter password"
read pas
while [ "$pas" != "secrete" ]; do
echo "Sorry, try again"
read pas
done
exit 0
```

a. If the 'pas' matches with 'secrete' in /etc/passwd file then shell script exits.
b. The shell script gives error in while statement
c. Irrespective of the users input, it always prints "Sorry, try again"
d. If user enters secrete then shell script exits otherwise it will read pas once again

49. The output of the following shell script would be:

```
for var in DAC August 2005
do
echo $var
echo " C-DAC "
done
```

a. DAC August 2005 b. C-DAC C-DAC C-DAC c. DAC C-DAC August C-DAC 2005 C-DA d. DAC C-DAC

50.

```
fun(){
echo "enter a number"
read num
num=$(($num+1))
echo "$num"
}
fun
exit 0
```

51.The above shell script
a. takes a number from user, increments it, and prints to the terminal.
b. prints "num" to terminal
c. gives error in the line fun (function call), because it should be written as fun()
d. exits without doing anything

Os re-Exam

1. The computer itself uses _____ language.
a. High level b. Natural c. Assembly **d. Machine**

2. Which of the following is not an operating system?

a. SuSE b. Unix **c. OSD** d. DOS

3. Object modules generated by assemblers may contain unresolved references. These are resolved using other object modules by the _____.

a. linker b. loader c. debugger d. compiler

4. Which of the following is not a necessary condition for a deadlock?

a. Mutual Exclusion b. Circular wait c. No preemption of resources **d. None of the above**

5. An operating system is _____.

a. Integrated software b. CD-ROM software **c. System software** d. Application software

6. Match the operating system abstractions in the left column to the hardware components in the right column

a. Thread 1. Interrupt

b. Virtual Address Space 2. Memory

c. File System 3. CPU

d. Signal 4. Disk

1.a-2, b-4, c-3, d-1

2.a-3, b-2, c-4, d-1

3.a-1, b-2, c-3, d-4

4.a-4, b-2, c-2, d-1

7. Which of the following file streams is not opened automatically in a UNIX program?

a. Standard terminal b. Standard input c. Standard output d. Standard error

8. Transfer of information to and from main memory takes place in terms of _____.

a. Bytes b. Words c. Bits d. Nibbles

9. Virtual Memory _____.

a. is an extremely large main memory b . is an extremely large secondary memory

c. is a type of memory used in supercomputers

d. allows execution of processes that may not be completely in memory

10. Page fault occurs when _____.

a. The page is corrupted by application software b. The page is in main memory

c. The page is not in main memory d. One tries to divide a number by 0

11. An operating system with multiprogramming capability is one that_____.

a. allows several users to use the same program at once by giving each a slice of time
b. loads several independent processes into memory and switches the CPU from one job to another as required
c. runs programs over more than one processor
d. None of the above

12. Where does swap space reside?
a. Disk b. RAM c. ROM d. On-chip cache

13. A 1000 MB hard disk has 512-byte sectors. Each track on the disk has 1000 sectors. The number of tracks on the disk is _____.
a.1024 **b.2048** c.512 d.1000

14. Which of the following is not an advantage provided by shared libraries?
a. They save disk space b. They save space in main memory
c. Multiple versions of the same library can be loaded into main memory **d. None of the above**

15. Spooling is _____.
a. The rewinding of tapes after processing
b. The temporary storage and management of output to printers and other output devices until they can cope with it
c. The recording of all user activities in a log file d. None of the above

16. One function of an operating system is to handle interrupts. Interrupts are_____.
a. a delay in processing due to operating system overload b. messages received from other computers
c. signals from hardware or software requesting attention from the operating system d. None of the above

17. Which of the following is not a solution for the critical section problem?
a. Monitor b. Semaphore c. Critical Region construct **d. Segmentation**

18. System calls are invoked by using _____.
a. Software interrupt b. Polling c. Indirect jump d. A privileged instruction

19. Paging is the transfer of pages between main memory and the _____.
a. Kernel b. Computer system **c. Auxiliary store** d. Output device

20. Which of the following commands is used to count the total number of lines, words and characters contained in a file?
a. count p **b. wc** c. wcount d.countw

21. The size of the virtual memory depends on the size of the _____.
a. Address bus b. Data bus c. Memory bus d. None of the above

22. Computers use the _____ language to process data.

a. Processing b. kilobyte **c. Binary** d. Representational

23. What do you mean by computer interrupt?

a. When a device has data to transfer it makes an interrupt. that means it needs your attention, the processor then stops what it is doing and deals with the device

b. The computer is interrupted by a signal from space saying it needs to close down the illegal application

c. when on word processor, if you type to much the computer makes an interrupt to let you there is no more room to type

d. When someone tries to add to your Conversation

24. Multiprogramming systems_____.

a. Are easier to develop than single programming systems b. Execute each job faster

c. Execute more jobs in the same time period d. Are used only one large mainframe Computers

25. The components that take data are located in the _____.

a. Input devices b. output devices c. system unit d. storage component

26. What is one of the advantages of Paging?

a. It does not suffer from internal fragmentation b. It does not suffer from spooling

c. It does not suffer from external fragmentation d. All of the above

27. The heart of any computer is processing the input in order to provide useful _____.

a. Information b. Output c. Kernel d. Communication

28. Which of the following memory management schemes does not allow multiprogramming? 3

a. Fixed partition b. Dynamic partition **c. Single-user contiguous scheme** d. Relocatable dynamic partitions

29. Which of the following is the correct way of calculating the address of the page frame?

a. Multiply the page frame number by the page frame size b. Divide the page frame size by the page frame number

c. Add the page frame number and the page frame size d. Multiply the page frame number by the Displacement

30. Which of the following concept is best at preventing page faults? 3

a. Paging b. Hit ratios **c. The working set** d. Address location resolution

31.The total effect of all CPU cycles, from both I/O-bound and CPU-bound jobs, approximates which of the following distribution curves?

a. Gaussian distribution b. Poisson distribution c. Lorentzian Distribution d. Random Distribution

32. Which of the following storage allocation scheme results in the problem of fragmentation?

a. Contiguous storage b. Non-contiguous storage c. Indexed storage d. Direct storage

33. Which of the following commands in UNIX gives the user the capability of executing one program from another program?
a. nice b. fork c. exexv d. nohup

34. What does a cycle in a wait-for graph indicate?
a. Deadlock b. Preemptive c. Non-Preemptive 4. None of the above

35. What kind of CPU burst an I/O-bound program would typically have?
a. Long **b. Short** c. Average d. All of the above

36. UNIX uses the _____ page replacement algorithm.
a. LRU b. MRU c. FCFS **d. FIFO**

37. The _____ command will display the absolute pathname for the directory that you are working in. 2
a. dir **b.pwd** c.ls d. whereami

38. Which command would you use to create a sub-directory in your home directory?
a. mkdir b. dir c. cp d. rm

38. Round-robin scheduling is _____.
a. Non- preemptive b. It depends **c. Preemptive** d. None of the above

39. Which command can be used to display the contents of a file on the screen?
a.ls **b.cat** c. dog d. grep

40. What is the Process Input Queue?
a. A collection of processes b. A collection of processes on the disk that have already executed
c .A collection of processes on the disk that are waiting to be brought into memory for execution d. Both 1 and 2

41. What is Swapping?
a. The process of moving a process within memory to and from the backing store
b. The process of moving a process within memory to backing store
c. The process of moving a process to memory
d. All of the above

42. Using the SJF algorithm, which process is allocated the CPU first? 3
a. The process that requests the CPU first b. The process that requests the CPU last
c. The process with the smallest CPU execution time d. None of the above

43. Which of the following is not a scheduling algorithm?

a. First-Come First-Serve **b. Round Bear** c. Shortest Job First d. None of the above

44. Which process is allocated the CPU first in FCFS algorithm?

a. The process that requests the CPU first b. The process that requests the CPU last

c. Processes are allocated the CPU randomly d. None of the above

45. What will be the order when information is processed with direct access?

a. Any order b. Sequential order c. Non-sequential order d. None of the above

46.What will be the order when information is processed with sequential access?

a. Any order **b. Sequential order** c. Non-sequential order d. None of the above

47. Cache memory refers to _____.

a. cheap memory that can be plugged into the mother board to expand main memory

b. fast memory present on the processor chip that is used to store recently accessed data

c. a reserved portion of main memory used to save important data

d. a special area of memory on the chip that is used to save frequently used constants

50.A memory management technique used to improve computer performance is_____.

a. Selecting memory chips based on their cost

b. Storing as much data as possible on disk

c. Using the cache to store data that will most likely be needed soon

d. Preventing data from being moved from the cache to primary memory

51. What do you mean by defragmentation?

a. keyboard that allows for a more natural positioning of your arms and hands.

b. The time it takes to read/write head to move to a specific data track; one of the delays associated with reading or writing data on a computer disk drive.

c. Pointing device you can use instead of a mouse. These devices sense the position of your finger and then move the pointer accordingly.

d. A utility that reduces the amount of fragmentation by physically organizing the contents of the disk to store the pieces of each file contiguously.

52. Which of the following memory management schemes optimizes fragmentation?

a. Single-user contiguous scheme b. Fixed partition c. Dynamic partition **d. Relocatable dynamic partitions**

53. The _____ is used to store the highest location in memory accessible by each program.

54. _____ is the process of collecting fragments of available memory space into contiguous blocks by moving programs and data in a computer's memory or disk.

55. Which of the following are the disadvantages of a fixed partition scheme (choose all that apply)?
a. Requires that the entire program be loaded into memory
b. Requires that the entire program be stored contiguously
c. Requires that the entire program remain in memory until the job is completed
d. Does not allow multiprogramming

56. The phenomenon of partial usage of fixed partitions and the coinciding creation of unused spaces within the partition is called _____

Operating Systems Concepts (60 Minutes)

1. Which one is not a system call?
a. execl b. execve c. fork d. All of the above

2. Binary Semaphores are used for _____.
a. resource allocation b. critical sections c. mutual exclusion d. synchronization

3. What dispatcher does?
a. Select the process from the ready queue b. Run the process from the ready queue
c. Select and run the process from the ready queue d. None of the above

4. Which one is the correct statement regarding thread?
a. Logical extension of the process. b. Very similar to the process.
c. Threads have there own address space they do not use the process address space.
d. Threads share the same address space that is used by the process

5. Which system call will you use to get the parent of the process?
a. getp() b. getppid() c. getparentid() d. None of the above

6. What is process control block?
a. It is data structure that represents the process.
b. It is a data structure, which is part of the user space, and it represents the process.
c. It is a data structure, which is part of the kernel space, and it represents the process.
d. It is not a data structure which can be in virtual address space it represent the process.

7. Which one is not a part of the kernel?

a. Memory management b. Debuggers management
c. Interrupt management d. Timer and clock management

8. What is the kernel architecture for Linux?
a. Micro kernel b. Macro kernel c. Monolithic kernel d. Hybrid kernel

9. Normally, when a hardware interrupt occur.
a. mode switch and context-saving occur. b. context-switch and context-saving occur.
c. Both 1 and 2 d. None of the above

10. What type of file system Linux is using?
a. FAT –32 b. NTFS c. LFS d. Ext3

11. During process execution, which state transaction, is not possible?
a. Ready state to running state b. Running state to block state
c. Block state to terminate state d. Block state to ready state

12. _____ signal generate when we try to access the illegal memory location using invalid pointer.
a. SIGSTOP b. SIGSEGV c. SIGTERM d. SIGNULL

13. What will be the possibility, when process comes in wait or block state?
a. disk operation b. time slice expire c. due to the higher priority process arrival d. All of the above

14. What is the fundamental scheduling block for operating system?
a. Kernel Thread b. Process Control Block (PCB) c. Light Weight Process (LWP) d. User Thread

15. Which command can be use on Linux platform to shutdown the system?
a. shutdown –r now b. shutdown c. init 0d. init 6

16. What is attenuation?
a. Noise on the cable b. Loss of signal strength c. Unwanted signals d. None of the above

17. Which Inter Process Communication mechanism is fastest to exchange the data between processes?
a. PIPE b. FIFO c. Shared Memory d. Message Queue

18. Bootstrap loader is _____.
a. A program, which resides in the user space. b. A program, which resides in ROM.
c. A program, which resides in the RAM. d. A program, which is a module of the kernel space.

19. The page table entry contains _____.

a. the information regarding given page is valid or not.
b. the information regarding given segment is valid or not.
c. the information regarding given page table is valid or not.
d. All of the above

20. POSIX pthread library implementation in Linux schedules _____
a. user threads without the help of the kernel. b. user threads with the help of light weight process.
c. user threads with the help of the kernel. d. user threads with the help of heavy weight process.

21. How many processes can be active in a monitor at a time?
a. Any no of processes b. Only one c. Only two d. None of the above

22. Segmentation leads to _____.
a. External Fragmentation b. Internal Fragmentation c. Both 1 and 2 d. All of the above

23. What is the fundamental scheduling block for operating system?
a. Kernel Thread b. Light Weight Process (LWP) c. Process Control Block (PCB) d. User Thread

24. In static priority based scheduling _____.
1. Priorities are decided at the time of the design and not changed during execution.
2. Priorities are decided at the time of design and may be changed during execution by APIs.
3. Priorities are decided by the scheduler during execution.
4. All of the above

25. Paging leads to _____.
a. Internal Fragmentation b. External Fragmentation c. Both 1 and 2 d. All of the above

26. User space and Kernel space are defined by:
a. Kernel b. Hardware-CPU c. Both 1 and 2 d. Administrator

27. Conventional RTOS uses _____
a. only kernel space. b. only user space. c. may be user space and kernel space. d. None of the above

28. With any Disk Scheduling Algorithms, Performance depends on _____.
a. Number of requests b. Number and types of requests c. Types of requests d. None of the above

29. What happens when a page fault occur for a valid legal virtual address?
a. Process will terminate b. Process will block c. None of the above
d. The process will restart after the page is brought to the main memory and page table entry will update.

30. What happens when a page fault occur for an invalid_illegal virtual address?
a. Process will terminate b. Process will block c. All of the above
d. The process will restart after the page is brought to the main memory and page table entry will update.

31. What ping command does?
a. It sends ICMP ECHO_REQUEST to network hosts.
b. It sends ICMP ECHO_REQUEST to network servers only.
c. It sends ICMP non ECHO_REQUEST to network host.
d. It sends ICMP non ECHO_REQUEST to network servers only.

32. What linker does?
a. merging object files b. sorting text and data c. resolve symbols across modules d. All of the above

33. How can we find out the free space size to use on Linux system hard disk partition?
a. df –hs b. freedisk –hs **c. fdisk –hs** d. None of the above

34. How can we get the information about the CPU on the Linux system?
a. cat /usr/cpuinfo **b. cat /proc/cpuinfo** c. cat /root/proc/cpuinfo d. cat /root/usr/cpuinfo

35. Where the main system message log file information get stored?
a. /var/log/message b. /usr/log/message c. /src/log/message d. /root/log/message

36. Which is the Linux kernel image file from the following and what is location in the file system?
a. kimage and location is /boot b. kernelimage and location is /usr
c. vmliunz and location is /boot d. kimage and location is /usr

37. By using interrupt which kind of problem will be eliminated?
a. Spooling **b. Polling.** c. Job scheduling d. None of the above

38. Virtual memory with paging mechanism (pagereplacement technique) provides.
a. runtime relocatability b. memory extension c. memory protection **d. All of the above**

39. inode number represents _____.
a. the directory on the file system uniquely. **b. all types of files on the file system uniquely.**
c. all process running on the system. d. use of the inode in the file system.

40. Which statement is true?
a. Cache memory is type of the nonvolatile memory b. RAM stands for reliable access memory
c. Cache resides between main memory and CPU d. Hard disk is made up of different layer of the RAM

41. Loader is use to _____.
a. load the kernel from harddisk to main memory.
b. load the appropriate program into the main memory.
c. create the process and load in to the main memory.
d. just make the program ready to load and loading in to memory is done by another process.

42. Which statement is true for the deadlock?
a. It is very usual, when a process terminates, it became dead process and this leads to dead lock
b. Deadlock arises when a process try to access a non shareable resources.
c. Deadlock arises when process is holding some resources and it wants some more resources that are already hold by some other process and no one want to release their resources.
d. Deadlock arises when we try to lock the process and the process is in running state that lock become a dead lock.

43. Which one is default shell for the Linux?
a. csh b. tcsh c. ksh d**. bash**

44. Which statement is true?
a. Process is a passive entity. b. We cannot divide process in further threads.
c. Process is an active instance of the program.
d. Threads do not use the memory space provided by the process.

45. Which CPU scheduling algorithm is non-preemptive type from the following?
a. Shortest job first scheduling. b. Round robin scheduling.
c. Priority based scheduling. **d. First come first serve based scheduling.**

46. Which statement is true from the following?
a. A safe state is a deadlock state always. b. An unsafe state is a deadlock state always.
c. An unsafe state has a probability to be a deadlock state. d. All are true.

47. copy-on-write concept is _____.
a. applicable only for two unrelated processes.
b. used by the processes those created with the help of exec call.
c. used by the any kind of process no restriction.
d. used by the related processes.

48. Which register is use for memory management?
a. base register b. bound register and stack pointer
c. base and bound register d. base and stack pointer register

49. What is the use of the program counter register?
a. It points to the next program in the execution.
b. It points to the next instruction statement in the program.
c. It points to the next block of code in the execution.
d. None of the above

50. What are the resources for the computer system?

a. CPU cycles. b. System buses. c. Operating system code and data structure. **d. All of the above**

Operating Systems

Q.1 Fill in the blanks:

1. Single system image is obtained in case of _____
2. Turnaround Time refers to _____.
3. Short-term Scheduler or CPU-Scheduler_____ scheduler selects the process that is ready to execute to CPU.
4. Banker's algorithm is an example of _Deadlock___ avoidance.
5. _____ is an example of Distributed operating system.
6. _Round Robin_ is an example of timesharing scheduling policy.
7. _____is an example of shareable resource and _____ is an example for non shareable resource.
8. _FIFO_ and _Optimum page replacement algorithm_ are the popular page replacement algorithms.
9. _____ is to NT , where as _____ is to DOS and _____ is to UNIX.
10. Give the expansion of the following with reference to the operating systems concepts: FCB is
11. _____IOCS is _____
12. Throughput in case of multiprogramming is Number of programs processed by it per unit time _.
13. _____is process of modifying the addresses used in the address sensitive
14. instructions of a program such that the program can execute correctly from the designated area of memory.
15. A program is a Passive entity , whereas a process is a Active entity.
16. Mutex is a _Binary__Semaphore.
17. _____ is the coincidence of high paging traffic and low CPU utilization.
18. FCFS stands for __First Come First Served__.
19. The Scheduling policy in case of a batch processing system is
20. _____.
21. Multiprogramming degenerates to _____ system if there is no proper mix of CPU and I/O bound jobs.
22. DMA stands for _ direct memory access __
23. Protection of memory is ensured using _____ and

24. _____.

25. _____ is forceful deallocation of a resource.

26. SPOOLING stands for simultaneous peripheral operations on-line

27. A _____ operating system is an operating system which requires a timely response from a computer system.

28. _____ is a program in execution.

29. DOS is an example of _____ user system.

30. Unix is an example of _____ user system.

31. Unix uses _____ scheduling policy .

32. _____ and _____ are the goals of an operating system.

33. _____ is a distributed operating system.

34. The _____ determines which process is to be executed next.

35. PSW stands for Pogram Status Word

36. Mutex is an acronym for Abbrevations

37. A tape is a Magnetic device.

38. Single system image is obtained in case of _____

39. Turnaround Time refers to _____.

40. Short-term Scheduler or CPU-Scheduler scheduler selects the process that is ready to execute to CPU.

41. _____ is an example of Distributed operating system.

42. Round Robin is an example of timesharing scheduling policy.

43. _____is an example of shareable resource and _____ is an example for nonshareable resource.

44. _____ and _____ are the popular page replacement algorithms.

45. Unix is a _____, _____, and _____ operating system.

46. Single system image is obtained in case of _____

47. Turn around Time refers to _____.

48. Short-term Scheduler or CPU-Scheduler scheduler selects the process that is ready to execute to CPU.

49. Banker's algorithm is an example of _ Deadlock___ avoidance.

50. _____ and _____ are the popular page replacement algorithms.

51. A file is anything held on _____ storage.

52. Compaction is done when you have _____ fragmentation.

53. _____ is when more time is spent in paging than in actually running programs.

54. A thread is a Lightweight process.

55. The process of loading the OS into main memory is done by the _____.

56. The motivations behind networks are _____, _____, _____ & _____.

57. NRU stands for _____ and LRU stands for Least Recently used .

58. SPOOLING stands for simultaneous peripheral operations on-line

59. Thrashing is the coincidence of high paging traffic and low CPU utilization.

60. _____ is a path under execution.

61. The OS maintains information about each process in a record called _____ .

62. _____ is a relation between number of page faults and number of page frames allocated to a process.

63. _____ is the implementation method in case of MS-DOS for non-contiguous allocation.

64. _____ is a mechanism whereby the output of one process is directed into input of another process.

65. The time elapsed for position of Read/Write head under the desired sector is called _____ .

66. _____ , _____ are the two ways to achieve relocation and address translation.

67. The CPU utilization is low when the system is _____.

68. A space allocated in units of fixed size is called _____ .

69. A modified page is also called as _____ page.

70. _____is an example of shareable resource and _____ is an example for non-shareable resource.

71. . _____ is forceful deallocation of a resource.

72. Unix is an example of _____ user system.

73. The _____ determines which process is to be executed next.

74. FAT stands for file allocation table .

Q.2 What do the following Abbreviations stand for?
HRQ=
a. FAT= file allocation table. b. PCB= process control block c. LWP=light weight process d. DMA=direct memory access.

Q.3 Multiple Answer Type Questions:

1. Which of the following is a non-preemptive O.S.?
a. UNIX b. Windows 95 c. Windows NT **d. None**

2. The CPU utilization is low when the system is _____.
a. Timesharing **b. Thrashing** c. Multiprocessing d. None of the above.

3. The following is not a form of IPC
a. Semaphore b. Pipe c. Shared memory **d. Buffering**

4. The fol. is a part of FAT
a. Sector info b. Disk type c. Modified info d. Date info

5. Device files in UNIX are
a. Device drivers b. Special files c. Pipes d. Unstructured files

6. The time of admission of a job to ready queue to completion is :
a. Turnaround time b. Burst time c. Response time

7. The fol. Signal is sent by the DMA controller :
a. HREQ b. HLDA c. DRQ

8. The main purpose(s) of an Operating System is/are:
a. convenience for the user b. efficient operation of the computer system
c. optimal use of computing resources **d. All of the above**

9. The signal the keyboard sends to the computer is a special kind of message called ___.
a. keyboard request b. keyboard controller c. interrupt controller **d. interrupt request**

10. The available routing schemes are :
a. fixed routing b. virtual routing c. dynamic routing

11. The interval from the time of submission of a process to the time of completion is _____.
a. Turnaround time b. Waiting time **c. Response time**

12. The I/O subsystem consist of:
a. A memory management component including buffering, caching, and spooling
b. A general device-driver interface c. Drivers for specific hardware devices d. All of the above

13. Which of the following CPU scheduling algorithms will prevent starvation problem?
a. Shortest-job-first b. Priority-scheduling **c. Priorit echanism y-scheduling with aging**
d. None of the above

14. Which of the following statements is true for a deadlock state
a. The system cannot run any process b. The system can run processes barring those involved in the deadlock
c. A running process cannot request any new resource d. All processes in the ready queue enter the wait queu

15. The problem of thrashing may be reduced by
a. Using prepaging mechanism b. Writing well structured programs c. Both 1 and 2 d. Neither 1 nor 2

16. Which of the following statements is not true?
a. A directory is a special type of file b. A directory is used to store file attributes
c. A directory is used to store file data d. A directory is used to store file access information

17. Biometric devices are used for user authentication in
a. Proof by knowlege method b. Challenge response method
c. Proof by possession method d. Proof by property method

18. A file system uses the contiguous space allocation mechanism for disk space allocation. For better utilization of disk space, this file system must use
a. A garbage collection mechanism b. A disk compaction mechanism c. A linked-block allocation mechanism
d. An indexed-block allocation mechanism

19. Which of the following statements is true?
a. A computer virus is a complete program that makes active attacks
b. A computer virus is a program segment that makes passive attacks
c. A logic bomb is a program segment that makes passive attacks
d. A logic bomb is a program that makes active attacks

20. The purpose of virtual memory system is to
a. Allow multiprocessing b. Allow multiprogramming c. Allow batch processing
d. Allow execution of a program that requires larger memory than the size of the physical main memory

21. The context of a process is the union of it's .

a. region tables, u area, system level context b. register context, pregion tables, user level context
c. system-level context, register context, user-level context d. process table, user-level context, register context

22. Which of the following is NOT a part of a process control block:
a. Values of CPU registers b. CPU scheduling information c. Memory limits of the process
d. List of files accessible to the process.

23. Suppose the architecture of a computer system is layered into the following four layers –
a. Operating systems software b. users' applications software c. hardware d. programming environment software

24. Which of the following is a logical sequence of the four layers from bottom to top?
a. 1, 2, 3, 4 b. 1, 3, 4, 2 c. 3, 1, 4, 2 d. 3, 4, 1, 2

25. A Job Control Language is used for
a. telling the system about a job's resource requirements
b. telling the system administrator / operator about job's resource requirements.
c. telling the programmer how to program the resource requirements of a job.
d. none of the above

26. Which was the first processor to introduce protected mode?
a) 8086 b) 80286 c) 80386 d) 80486

27. The protected mode is necessary for –
a. multi-tasking system b. multi-user system c. both a and b d. 16 bit programming

28. The segmented memory is provided mainly.
a. for higher speeds b.to maintain compatibility with old processors
c. for ease of application programming d. simple hardware

29. Which of the following features is NOT found in RISC architectures?
a. A limited instruction set b. A large number of registers c. Virtual memory d. A large number of execution modes

30. The first CPU with P6 architecture was –
a. Pentium b. Pentium Pro c. Pentium II d. Pentium III

31. The fastest storage element is –
a. CD-ROM b. DRAM c. EDO-DRAM d. SDRAM

32. Which peripheral requires the highest data transfer rate?
a. Sound Card b. Network card c. Hard disk d. Graphics Adapter

33. A virtual memory is required for -
a. increasing the speed b. increasing the addressing modes
c. overcoming the size limitation of main memory d. overcoming the size limitation of cache memory

34. When fork( ) is given
a. It creates a child process b. Allocates slot in process table c. Returns 0 to parent & ID to child d. All of the above

35. A TSR is a program which will
a. Be resident in the memory after termination of program b. Be called as and when the program is executed
c. Terminate and Soon Remove the program from the memory d. All of the above

36. CPU performance is based on
a. ALU width b. Clock speed **c. Number of instructions executed per second**

37. How well CPU interacts with the rest of the system
a. Both a and b b. None of the above

38. 80286 the addressing scheme is _____ addressing c
a. 8 bit b. 16 bit c. **24 bit** **d.**28 bit e. 32 bit

39. Shell executes $0 and returns the
a. Parameters entered in the command line b. Program name c. All of the above

40. profile file is present in
a. /usr b. /usr/user1 c. /etc/admin d. None of the above

41. Which of the following CPU scheduling algorithms will prevent starvation problem?
a. Shortest-job-first b. Priority-scheduling c. Priority-scheduling with aging mechanism d. None of the above

42. Which of the following statements is true for a deadlock state
a. The system cannot run any process
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46. A file system uses the contiguous space allocation mechanism for disk space allocation. For better utilization of disk space, this file system must use
a. A garbage collection mechanism b. A disk compaction mechanism c. A linked-block allocation mechanism

d. An indexed-block allocation mechanism

47. Peak Bandwidth of a 64-bit, 33 MHz based PCI bus would be:
a. 133 MB/s b. 266 MB/s c. 512 MB/s d. 33 MB/s

48. Main advantage of EISA bus over micro-channel bus was:
a. It offered more bandwidth over micro-channel b. It had software configurable devices
c. It was backward compatible with ISA d. It made the existing peripherals run faster.

49. Which of the following devices is asynchronous ?
a. SSRAM b. EPROM c. Disk controllers d. All of the above.

50. Which of the following operating systems is available for non-intel platforms ?
a. Windows-NT b. Solaris c. linux d. all of the above.

51. In the systems which do not have multiple CPUs, is the 'cache coherency' an issue while design?
a. Yes b. No

Q.4 SELECT TRUE OR FALSE:

1. It is possible to have a deadlock involving only a single process.
2. Unix is a network operating system.
3. All entries in FAT correspond to clusters.
4. A Device controller is a piece of hardware.
5. Round Robin understands priority.
6. SJF is the best scheduling policy.
7. Paging allows protection.
8. Circuit switching has two variants – connection oriented and connectionless.
9. LANs cover a radius of upto 10km.
10. Cipher text is decrypted text.
11. During system startup, program execution begins at addr FFF0H.
12. A virus is a type of worm.
13. Spooling uses the disk as a huge buffer, for reading as far ahead as possible on input devices and for storing output files until the output devices are able to accept them.
14. Ready queue in CPU scheduler is always a first-in, first-out (FIFO) queue.

Q.5 Short Answer Questions:

1. A process can change its state from block state to run state. Is this statement True or False? Justify your answer.
2. Differentiate between the CPU bound process and I/O bound process.
3. Can we prevent deadlocks by denying mutual-exclusion condition? Justify your answer.
4. What do you mean by locality of reference?
5. What is a dirty bit? Why is it used?
6. What is the difference between circuit switching and packet switching?
7. Justify the statement :

8. “It is possible to support multiprogramming without using timesharing. However it is impractical to support timesharing without using multiprogramming”

9. Justify the statement :

10. “Swapping improves/degrades the efficiency of system utilization”.

11. Describe the cause of READYÅ RUNNING transition.

12. What do you mean by “protection” incase of operating systems? How is it implemented?

13. What is Access Control List? Where is it used?

14. What is a deadlock? How does it occur?

15. What do you mean by scalability?

16. What is a capability list? Where is it used?

17. Comment on the statement:

18. “Interactive processes should have low/high priority”

19. Name secondary storage devices and explain where they are typically used.

20. Which type of scheduler controls the degree of multiprogramming?

21. What is a race condition?

22. Which condition(s) is/are very necessary for a deadlock. Justify your answer.

23. What do you mean by a “kernel”?

24. What do you mean by the “context” of a process?

25. Give one difference between a .COM file and .EXE file in DOS.

26. Name the necessary conditions for a deadlock.

27. What is a critical section?

28. What is IOCS? What are it functions?

29. Explain advantages of distributed operating systems:

30. Name different scheduling policies and explain.

31. Differentiate between the logical address space and physical address space.

32. Explain in brief what you mean by: 1.Multiprogramming 2.Multiprocessing.
33. Name the five typical file operations.

34. Draw a block diagram showing the process transitions.

35. A process can change its state from block state to run state. Is this statement True or False? Justify your answer.
36. Can we prevent deadlocks by denying mutual-exclusion condition? Justify your answer.
37. How many different types of files are possible on UNIX operating system ?

38. Name them.

39. What is demand paging?

40. Explain Distributed processing with the help of examples.

41. Differentiate between contiguous and non-contiguous memory allocation.

42. What Is deadlock? Give an example.

Explain the following:

a) Semaphores
b) Disk caching
c) Working set
d) Locality of reference
e) DMA
f) Non-preemptive OS

Q.6 Long answer Questions:

1. Consider a memory with 4 page frames, assuming that pages of a process are referenced in the following order:

2. 4,3, 2,1,4,3,5,4,3,2,1,5,2.

3. Show, which would be better FIFO or LRU.

4. Considering the above reference string show how Belady's anomaly occurs in case of FIFO.

5. How is memory re-used?

6. With the help of an example show the mapping from virtual address space to physical address space in case of virtual memory.
7. List the fields of the FCB and explain their use.

8. What is the difference between thread, process and Task?

9. What is the critical section problem? How is it handled?

10. Which condition(s) is/are very necessary for a deadlock? Justify your answer.

11. Discuss the use of Active file tables.
12. What constitutes the environment of a process?
13. What do you mean by “static and dynamic binding”?
14. What do you mean by an Inode? Where is it used?
15. How can a deadlock be avoided? Explain.
16. Write in detail the methods of LRU implementation.
17. Explain State Transition Diagram.
18. What is Inter-process communication?
19. Define the terms: Thread; process; Context of a process.
20. Describe the PC architecture with a block diagram
21. Discuss the various issues involved in Process Management

VITA

VITA

* Linux Commands *

PAGE:
DATE: / /

1. cd → To change directory.
2. mkdir → To create directory.
3. ls → content of directory.
4. pwd → present working directory (current location).
5. cd .. → One step ago.
6. cd ../.. → Two step ago.
7. touch → To create file.
8. cp file1.txt file2.txt → cp for copy file
9. cp -r Dir1 Dir2 → copy folder
10. cp -r Dir1/Dir2 . → copy from anywhere to currentdirectory
11. mkdir D1 D2 D3 → 'n' no of directory can we create in 1 line.
12. touch D1.txt D2.txt D3.txt → 'n' no. of files can create in one line.
13. mv original New → To rename diretory/file.
14. cp file1.txt ~/Shared/ → from Centos to window.
15. cp ~/Shared/ . → window to Centos.

* open vi editor → vi filename → enter
* Command mode; →
* User mode →

• enter to user mode → flint "i"
• enter to command mode → flint "Escape"

Command mode; → ① Shortcut mode :- dd, yy,
② type mode :- 1,4 dd like

* Colan (:) → ctrl+;

* wq :- To save.

* q! :- Not to save

* q :- Just read & out.

* dd :- cut or delet

* yy :- paste.

* p :- paste.

* In Shortcut mode; → To cut 3 lines ⇒ 3dd

* In type mode; → :1,3y → enter → p

* whoami → username.

* whereis → Location of file to whom we have to see

* tac filename → display content in reverse order.

* head filename → First 10 line display.

* tail filename → Last 10 line display.

* cp /bin/* . → All bin files & folder display.

* ls -r → Display reverse order data.

* mkdir -p ⇒ Dir1/Dir1-1/... Dir2/Dir2-2/...
  it means no. of directory in one line creates.

* ls -R → Display structured tree directory

* ls --sort=size → sort as bigger size first

* ls --sort=time → descend accord. to time.

* ls a* → All 'a' named file/dire. display.

* ls a* p* → All 'a' & 'p' —"— .

* ls [apl]* → All a, p & l —"— .

* ls [!apl]* → Except a, p & l —"— .

* Cat filename → file content display.

* cat > file.txt ctrl+D ⇒ Over-write previous data

* cat >> file.txt + ctrl+D ⇒ Append's the data