Date: January 21, 2012

Operating Systems Concepts (60 Minutes)

1. The computer itself uses _____ language.
   1. High level
   2. Natural
   3. Assembly
   4. Machine
2. Which of the following is not an operating system?
   1. SuSE
   2. Unix
   3. OSD
   4. DOS
3. Object modules generated by assemblers may contain unresolved references. These are resolved using other object modules by the _____.
   1. linker
   2. loader
   3. debugger
   4. compiler
4. Which of the following is not a necessary condition for a deadlock?
   1. Mutual Exclusion
   2. Circular wait
   3. No preemption of resources
   4. None of the above
5. An operating system is _____.
   1. Integrated software
   2. CD-ROM software
   3. System software
   4. 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?
   1. Standard terminal
   2. Standard input
   3. Standard output
   4. Standard error
8. Transfer of information to and from main memory takes place in terms of _____.
   1. Bytes
   2. Words
   3. Bits
   4. Nibbles
9. Virtual Memory _____.
   1. is an extremely large main memory
   2. is an extremely large secondary memory
   3. is a type of memory used in supercomputers
   4. allows execution of processes that may not be completely in memory
10. 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
11. An operating system with multiprogramming capability is one that_____.
    1. allows several users to use the same program at once by giving each a slice of time
    2. loads several independent processes into memory and switches the CPU from one job to another as required
    3. runs programs over more than one processor
    4. None of the above
12. Where does swap space reside?
    1. Disk
    2. RAM
    3. ROM
    4. 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 _____.
    1. 1024
    2. 2048
    3. 512
    4. 1000
14. Which of the following is not an advantage provided by shared libraries?
    1. They save disk space
    2. They save space in main memory
    3. Multiple versions of the same library can be loaded into main memory
    4. None of the above
15. Spooling is _____.
    1. The rewinding of tapes after processing
    2. The temporary storage and management of output to printers and other output devices until they can cope with it
    3. The recording of all user activities in a log file
    4. None of the above
16. One function of an operating system is to handle interrupts. Interrupts are_____.
    1. a delay in processing due to operating system overload
    2. messages received from other computers
    3. signals from hardware or software requesting attention from the operating system
    4. None of the above
17. Which of the following is not a solution for the critical section problem?
    1. Monitor
    2. Semaphore
    3. Critical Region construct
    4. Segmentation
18. System calls are invoked by using _____.
    1. Software interrupt
    2. Polling
    3. Indirect jump
    4. A privileged instruction

19. Paging is the transfer of pages between main memory and the _____.
    1. Kernel
    2. Computer system
    3. Auxiliary store
    4. Output device
20. Which of the following commands is used to count the total number of lines, words and characters contained in a file?
    1. count p
    2. wc
    3. wcount
    4. countw
21. The size of the virtual memory depends on the size of the _____.
    1. Address bus
    2. Data bus
    3. Memory bus
    4. None of the above
22. Computers use the _____ language to process data.
    1. Processing
    2. kilobyte
    3. Binary
    4. Representational
23. What do you mean by computer interrupt?
    1. 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
    2. The computer is interrupted by a signal from space saying it needs to close down the illegal application
    3. when on word processor, if you type to much the computer makes an interrupt to let you there is no more room to type
    4. When someone tries to add to your conversation
24. Multiprogramming systems_____.
    1. Are easier to develop than single programming systems
    2. Execute each job faster
    3. Execute more jobs in the same time period
    4. Are used only one large mainframe computers
25. The components that take data are located in the _____.
    1. Input devices
    2. output devices
    3. system unit
    4. storage component
26. What is one of the advantages of Paging?
    1. It does not suffer from internal fragmentation
    2. It does not suffer from spooling
    3. It does not suffer from external fragmentation
    4. All of the above
27. The heart of any computer is processing the input in order to provide useful _____.
    1. Information
    2. Output
    3. Kernel
    4. Communication
28. Which of the following memory management schemes does not allow multiprogramming?
    1. Fixed partition
    2. Dynamic partition
    3. Single-user contiguous scheme
    4. Relocatable dynamic partitions
29. Which of the following is the correct way of calculating the address of the page frame?
    1. Multiply the page frame number by the page frame size
    2. Divide the page frame size by the page frame number
    3. Add the page frame number and the page frame size
    4. Multiply the page frame number by the displacement
30. Which of the following concept is best at preventing page faults?
    1. Paging
    2. Hit ratios
    3. The working set
    4. 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?
    1. Gaussian distribution
    2. Poisson distribution
    3. Lorentzian Distribution
    4. Random Distribution
32. Which of the following storage allocation scheme results in the problem of fragmentation?
    1. Contiguous storage
    2. Non-contiguous storage
    3. Indexed storage
    4. Direct storage
33. Which of the following commands in UNIX gives the user the capability of executing one program from another program?
    1. nice
    2. fork
    3. exexv
    4. nohup
34. What does a cycle in a wait-for graph indicate?
    1. Deadlock
    2. Preemptive
    3. Non-Preemptive
    4. None of the above
35. What kind of CPU burst an I/O-bound program would typically have?
    1. Long
    2. Short
    3. Average
    4. All of the above
36. UNIX uses the _____ page replacement algorithm.
    1. LRU
    2. MRU
    3. FCFS
    4. FIFO
37. The _____ command will display the absolute pathname for the directory that you are working in.
    1. dir
    2. pwd
    3. ls
    4. whereami

38. Which command would you use to create a sub-directory in your home directory?
    1. mkdir
    2. dir
    3. cp
    4. rm
39. Round-robin scheduling is _____.
    1. Non- preemptive
    2. It depends
    3. Preemptive
    4. None of the above
40. Which command can be used to display the contents of a file on the screen?
    1. ls
    2. cat
    3. dog
    4. grep
41. What is the Process Input Queue?
    1. A collection of processes
    2. A collection of processes on the disk that have already executed
    3. A collection of processes on the disk that are waiting to be brought into memory for execution
    4. Both 1 and 2
42. What is Swapping?
    1. The process of moving a process within memory to and from the backing store
    2. The process of moving a process within memory to backing store
    3. The process of moving a process to memory
    4. All of the above
43. Using the SJF algorithm, which process is allocated the CPU first?
    1. The process that requests the CPU first
    2. The process that requests the CPU last
    3. The process with the smallest CPU execution time
    4. None of the above
44. Which of the following is not a scheduling algorithm?
    1. First-Come First-Serve
    2. Round Bear
    3. Shortest Job First
    4. None of the above
45. Which process is allocated the CPU first in FCFS algorithm?
    1. The process that requests the CPU first
    2. The process that requests the CPU last
    3. Processes are allocated the CPU randomly
    4. None of the above
46. What will be the order when information is processed with direct access?
    1. Any order
    2. Sequential order
    3. Non-sequential order
    4. None of the above
47. What will be the order when information is processed with sequential access?
    1. Any order
    2. Sequential order
    3. Non-sequential order
    4. None of the above
48. Cache memory refers to _____.
    1. cheap memory that can be plugged into the mother board to expand main memory
    2. fast memory present on the processor chip that is used to store recently accessed data
    3. a reserved portion of main memory used to save important data
    4. a special area of memory on the chip that is used to save frequently used constants
49. A memory management technique used to improve computer performance is_____.
    1. Selecting memory chips based on their cost
    2. Storing as much data as possible on disk
    3. Using the cache to store data that will most likely be needed soon
    4. Preventing data from being moved from the cache to primary memory
50. What do you mean by defragmentation?
    1. keyboard that allows for a more natural positioning of your arms and hands.
    2. 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.
    3. Pointing device you can use instead of a mouse. These devices sense the position of your finger and then move the pointer accordingly.
    4. A utility that reduces the amount of fragmentation by physically organizing the contents of the disk to store the pieces of each file contiguously.

Date: July 31, 2010

Operating Systems Concepts (60 Minutes)

1. Which CPU scheduling algorithm is the Preemptive scheduling?
   1. First Come First serve (FCFS)
   2. Round Robin (RR)
   3. Both
   4. None of the above.
2. Which CPU scheduling algorithm may suffer from the Starvation Problem
   1. Round Robin (RR)
   2. First Come First serve (FCFS)
   3. Priority scheduling
   4. None of the above.
3. A Multithreaded programming Benefits
   1. Increase Responsiveness to user.
   2. Utilization of multiprocessor architecture.
   3. Resource Sharing
   4. All of above
4. Circular waiting is
   1. not a necessary condition for deadlock
   2. a necessary condition for deadlock, but not a sufficient condition.
   3. a sufficient condition
   4. 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?
   1. 2^12 =4096 bytes
   2. 2^20 bytes
   3. 20 byte
   4. None of the above.
6. Advantage of memory management using virtual memory
   1. More Process can be loaded in the momery. to try to keep the processor busy
   2. A process whose image larger than memory can be executed
   3. Both 1 & 2
   4. None of the above.
7. Following is not a Disk scheduling algorithm:
   1. First Come First serve (FCFS)
   2. Round Robin
   3. SCAN
   4. LOOK
8. Which of the following condition is necessary for the deadlock
   1. Mutual exclusion and Hold-and-wait
   2. No preemption and circular wait
   3. Both 1 & 2
   4. None of the above.
9. LOOK disk scheduling algorithm:
   1. Select the request with minimum seek time from current head position.
   2. Moves the head from one end of the disk to other end, servicing request along the way.
   3. 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.
   4. None of the above.
10. Thrashing is:
    1. CPU scheduling algorithm
    2. disk-scheduling algorithm
    3. High Paging Activity
    4. None of the above.
11. Spooling
    1. In spooling, a process writes its output to a temporary file rather than to an output device, such as a printer
    2. In spooling, a process writes its output to an output device, such as a printer
    3. Both 1 & 2
    4. None of the above.
12. A "critical section" of code is
    1. A section that is executed very often, and therefore should be written to run very efficiently.
    2. A section of the program that must not be interrupted by the scheduler.
    3. A section of the program that is susceptible to race conditions, unless mutual exclusion is enforced.
    4. 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?
    1. 80%
    2. 70%
    3. 90%
    4. 100%
14. "Time Quantum" in Round Robin Scheduling algorithm:
    1. Time between the submission and completion of a process.
    2. Time for the disk arm to move to the desired cylinder
    3. Maximum time a process may run before being preempted
    4. 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?
    1. 1024
    2. 128
    3. 512
    4. 64
16. What is the "turnaround time" in scheduling algorithms?
    1. Time for a user to get a reaction to his/her input.
    2. Time between the submission and completion of a process
    3. Time required to switch from one running process to another
    4. Delay between the time that a process blocks and the time that it unblocks

17. "chmod " command in Linux
    1. Change the operating system mode
    2. Change the command mode
    3. Change Access mode of file
    4. None of the above.
18. "grep" Command is used
    1. make each column in a document in a separate file
    2. combine a file and write them into a temp file
    3. search a file for lines containing a given format.
    4. None of the above.
19. A program which is loaded into memory & is executing is commonly referred to as a:
    1. Software.
    2. Job.
    3. Process.
    4. Program
20. Bankers Algorithm is used for:
    1. Deadlock Characterization
    2. Deadlock Handling
    3. Deadlock avoidance
    4. Deadlock Detection
21. To enable a process to be larger than amount of memory allocated, we use:
    1. TLB.
    2. Fragmentation.
    3. Overlays.
    4. None of the above.
22. A _____ is a memory area that stores data while they are transferred between 2 devices:
    1. Spool
    2. Buffer
    3. Cache
    4. Kernel
23. The command used to display long listing of file is:
    1. ls –l
    2. ls –a
    3. ls –t
    4. ls –r
24. The _____ file stores information about file systems that are mountable during booting:
    1. /lib
    2. /mnt
    3. /etc/fstab
    4. /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:
    1. cd, pwd
    2. pwd, cd
    3. cd, cp
    4. cp, cd
26. _____ Is a special user who has ultimate privilege on Linux system:
    1. Any user
    2. Super user
    3. Administrator
    4. None of the above
27. In Linux, we can display the content of text file by using the command:
    1. display
    2. show
    3. cat
    4. All of the above
28. Which command is used to change the group of a file?
    1. change group
    2. chgrp
    3. changep
    4. None of the above
29. If more than one process is blocked, the swapper chooses a process with the _____
    1. Lowest Priority.
    2. Highest Priority.
    3. Medium priority
    4. No Priority.
30. In Batch processing system the memory allocator are also called as _____
    1. Long – term scheduler
    2. Short – term scheduler
    3. Medium – term scheduler
    4. 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 _____
    1. seek time
    2. latency time
    3. transmission time
    4. Read/Write time
32. All other processes wanting to enter their respective critical regions are kept waiting in a queue called as _____.
    1. Ready queue.
    2. Waiting queue
    3. Semaphore queue.
    4. Critical queue.
33. There would be some time lost in turning attention from process 1 to process 2 is called as _____
    1. Process transferring.
    2. Process switching
    3. Process turning.
    4. 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....)
    1. Leaving.
    2. Skipping.
    3. Interleaving.
    4. Jumping
35. An alternative to the scheme of DMA is called _____.
    1. Programmed I/O.
    2. Mapped I/O.
    3. I/O Mapped I/o
    4. 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 _____.
    1. Page Map Table (PMT).
    2. Page Frame Data Table (PFDT).
    3. Page Table Entry (PTE).
    4. 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).
    1. heavyweight processes.
    2. Lightweight processes.
    3. Kernel processes.
    4. System processes

38. To know the name of the Shell program we use following command (Bourne Shell).
    1. $0
    2. $1
    3. $2
    4. $9

39. To hold the exit status of the previous command _____ command is used.
    1. $$
    2. $?
    3. $/
    4. $

40. To know the Process id of the current process _____ command is used.
    1. $$
    2. $?
    3. $/
    4. $

41. To know the path of the Shell ____ command is used.
    1. PATH
    2. CDPATH
    3. SHELL
    4. PS1

42. To print a file in Linux which command is used
    1. print
    2. ls –p
    3. lpr
    4. None

43. To create an additional link to an existing file, which command is used
    1. ln
    2. sbln
    3. cp
    4. none

44. The Linux command "cp ch? book"
    1. Copies all files starting with ch to the directory book
    2. Copies all files with three-character names and starting with ch to the directory book
    3. Compress whether a file starting with ch exists in the directory book
    4. None of the above

45. Command used in shell to read a line of data from terminals
    1. rline
    2. line
    3. lread
    4. None of these

46. In vi, to change a word in command mode, one has to type
    1. cw
    2. wc
    3. lw
    4. none

47. What would be the output of the following shell script?

```
foo=10
x=foo
eval y='$'$x
echo $y
```

    1. foo
    2. 10
    3. x
    4. $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
```

    1. If the 'pas' matches with 'secrete' in /etc/passwd file then shell script exits.
    2. The shell script gives error in while statement
    3. Irrespective of the users input, it always prints "Sorry, try again"
    4. 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
```

    1. DAC August 2005
    2. C-DAC C-DAC C-DAC
    3. DAC C-DAC August C-DAC 2005 C-DAC
    4. DAC C-DAC

50.

```
fun(){
echo "enter a number"
read num
num=$(($num+1))
echo "$num"
}

fun
exit 0
```

The above shell script
    1. takes a number from user, increments it, and prints to the terminal.
    2. prints "num" to terminal
    3. gives error in the line fun (function call), because it should be written as fun()
    4. exits without doing anything

Date: July 21, 2012

Operating Systems Concepts (60 Minutes)

1. Which one is not a system call?
   1. execl
   2. execve
   3. fork
   4. All of the above
2. Binary Semaphores are used for _____.
   1. resource allocation
   2. critical sections
   3. mutual exclusion
   4. synchronization
3. What dispatcher does?
   1. Select the process from the ready queue
   2. Run the process from the ready queue
   3. Select and run the process from the ready queue
   4. None of the above
4. Which one is the correct statement regarding thread?
   1. Logical extension of the process.
   2. Very similar to the process.
   3. Threads have there own address space they do not use the process address space.
   4. 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?
   1. getp()
   2. getppid()
   3. getparentid()
   4. None of the above
6. What is process control block?
   1. It is data structure that represents the process.
   2. It is a data structure, which is part of the user space, and it represents the process.
   3. It is a data structure, which is part of the kernel space, and it represents the process.
   4. 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?
   1. Memory management
   2. Debuggers management
   3. Interrupt management
   4. Timer and clock management
8. What is the kernel architecture for Linux?
   1. Micro kernel
   2. Macro kernel
   3. Monolithic kernel
   4. Hybrid kernel
9. Normally, when a hardware interrupt occur.
   1. mode switch and context-saving occur.
   2. context-switch and context-saving occur.
   3. Both 1 and 2
   4. None of the above
10. What type of file system Linux is using?
    1. FAT –32
    2. NTFS
    3. LFS
    4. Ext3
11. During process execution, which state transaction, is not possible?
    1. Ready state to running state
    2. Running state to block state
    3. Block state to terminate state
    4. Block state to ready state
12. _____ signal generate when we try to access the illegal memory location using invalid pointer.
    1. SIGSTOP
    2. SIGSEGV
    3. SIGTERM
    4. SIGNULL
13. What will be the possibility, when process comes in wait or block state?
    1. disk operation
    2. time slice expire
    3. due to the higher priority process arrival
    4. All of the above
14. What is the fundamental scheduling block for operating system?
    1. Kernel Thread
    2. Process Control Block (PCB)
    3. Light Weight Process (LWP)
    4. User Thread
15. Which command can be use on Linux platform to shutdown the system?
    1. shutdown –r now
    2. shutdown
    3. init 0
    4. init 6
16. What is attenuation?
    1. Noise on the cable
    2. Loss of signal strength
    3. Unwanted signals
    4. None of the above
17. Which Inter Process Communication mechanism is fastest to exchange the data between processes?
    1. PIPE
    2. FIFO
    3. Shared Memory
    4. Message Queue
18. Bootstrap loader is _____.
    1. A program, which resides in the user space.
    2. A program, which resides in ROM.
    3. A program, which resides in the RAM.
    4. A program, which is a module of the kernel space.
19. The page table entry contains _____.
    1. the information regarding given page is valid or not.
    2. the information regarding given segment is valid or not.
    3. the information regarding given page table is valid or not.
    4. All of the above
20. POSIX pthread library implementation in Linux schedules _____
    1. user threads without the help of the kernel.
    2. user threads with the help of light weight process.
    3. user threads with the help of the kernel.
    4. user threads with the help of heavy weight process.

21. How many processes can be active in a monitor at a time?
    1. Any no of processes
    2. Only one
    3. Only two
    4. None of the above
22. Segmentation leads to _____.
    1. External Fragmentation
    2. Internal Fragmentation
    3. Both 1 and 2
    4. All of the above
23. What is the fundamental scheduling block for operating system?
    1. Kernel Thread
    2. Light Weight Process (LWP)
    3. Process Control Block (PCB)
    4. 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 _____.
    1. Internal Fragmentation
    2. External Fragmentation
    3. Both 1 and 2
    4. All of the above
26. User space and Kernel space are defined by:
    1. Kernel
    2. Hardware-CPU
    3. Both 1 and 2
    4. Administrator
27. Conventional RTOS uses _____
    1. only kernel space.
    2. only user space.
    3. may be user space and kernel space.
    4. None of the above
28. With any Disk Scheduling Algorithms, Performance depends on _____.
    1. Number of requests
    2. Number and types of requests
    3. Types of requests
    4. None of the above
29. What happens when a page fault occur for a valid legal virtual address?
    1. Process will terminate
    2. Process will block
    3. The process will restart after the page is brought to the main memory and page table entry will update.
    4. None of the above
30. What happens when a page fault occur for an invalid_illegal virtual address?
    1. Process will terminate
    2. Process will block
    3. The process will restart after the page is brought to the main memory and page table entry will update.
    4. All of the above
31. What ping command does?
    1. It sends ICMP ECHO_REQUEST to network hosts.
    2. It sends ICMP ECHO_REQUEST to network servers only.
    3. It sends ICMP non ECHO_REQUEST to network host.
    4. It sends ICMP non ECHO_REQUEST to network servers only.
32. What linker does?
    1. merging object files
    2. sorting text and data
    3. resolve symbols across modules
    4. All of the above
33. How can we find out the free space size to use on Linux system hard disk partition?
    1. df -hs
    2. freedisk -hs
    3. fdisk -hs
    4. None of the above
34. How can we get the information about the CPU on the Linux system?
    1. cat /usr/cpuinfo
    2. cat /proc/cpuinfo
    3. cat /root/proc/cpuinfo
    4. cat /root/usr/cpuinfo
35. Where the main system message log file information get stored?
    1. /var/log/message
    2. /usr/log/message
    3. /src/log/message
    4. /root/log/message
36. Which is the Linux kernel image file from the following and what is location in the file system?
    1. kimage and location is /boot
    2. kernelimage and location is /usr
    3. vmliunz and location is /boot
    4. kimage and location is /usr
37. By using interrupt which kind of problem will be eliminated?
    1. Spooling
    2. Polling.
    3. Job scheduling
    4. None of the above
38. Virtual memory with paging mechanism (page-replacement technique) provides.
    1. runtime relocatability
    2. memory extension
    3. memory protection
    4. All of the above
39. inode number represents _____.
    1. the directory on the file system uniquely.
    2. all types of files on the file system uniquely.
    3. all process running on the system.
    4. use of the inode in the file system.
40. Which statement is true?
    1. Cache memory is type of the nonvolatile memory
    2. RAM stands for reliable access memory
    3. Cache resides between main memory and CPU
    4. Hard disk is made up of different layer of the RAM

41. Loader is use to _____.
    1. load the kernel from harddisk to main memory.
    2. load the appropriate program into the main memory.
    3. create the process and load in to the main memory.
    4. 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?
    1. It is very usual, when a process terminates, it became dead process and this leads to dead lock
    2. Deadlock arises when a process try to access a non shareable resources.
    3. 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.
    4. 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?
    1. csh
    2. tcsh
    3. ksh
    4. bash

44. Which statement is true?
    1. Process is a passive entity.
    2. We cannot divide process in further threads.
    3. Process is an active instance of the program.
    4. Threads do not use the memory space provided by the process.

45. Which CPU scheduling algorithm is non-preemptive type from the following?
    1. Shortest job first scheduling.
    2. Round robin scheduling.
    3. Priority based scheduling.
    4. First come first serve based scheduling.

46. Which statement is true from the following?
    1. A safe state is a deadlock state always.
    2. An unsafe state is a deadlock state always.
    3. An unsafe state has a probability to be a deadlock state.
    4. All are true.

47. copy-on-write concept is _____.
    1. applicable only for two unrelated processes.
    2. used by the processes those created with the help of exec call.
    3. used by the any kind of process no restriction.
    4. used by the related processes.

48. Which register is use for memory management?
    1. base register
    2. bound register and stack pointer
    3. base and bound register
    4. base and stack pointer register

49. What is the use of the program counter register?
    1. It points to the next program in the execution.
    2. It points to the next instruction statement in the program.
    3. It points to the next block of code in the execution.
    4. None of the above

50. What are the resources for the computer system?
    1. CPU cycles.
    2. System buses.
    3. Operating system code and data structure.
    4. All of the above