

OPERATING SYSTEM

Q1. Which of the following is a non-preemptive O.S.?

- a) UNIX
- b) Windows 95
- c) Windows NT
- d) **None**

Q2. The CPU utilization is low when the system is _____.

- a) Timesharing
- b) **Thrashing**
- c) Multiprocessing
- d) None of the above.

Q3. . Biometric devices are used for user authentication in

- a. Proof by knowledge method
- b. Challenge response method
- c. **Proof by possession method**
- d. Proof by property method

Q4. 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

Q5. The context of a process is the union of it's _____ .

- a. region tables, u area, system level context
- b. register context, pregon tables, user level context
- c. system-level context, register context, user-level context
- d. **process table, user-level context, register context**

Q6. 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.**

Q.7 Which was the first processor to introduce protected mode?

- a) 8086
- b) 80286
- c) 80386
- d) 80486

Q8. 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

Q9. The fastest storage element is -

- a) CD-ROM
- b) DRAM
- c) EDO-DRAM
- d) **SDRAM**

Q10. Which peripheral requires the highest data transfer rate?

- a) Sound Card
- b) Network card
- c) **Hard disk**
- d) Graphics Adapter

Q11. 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

Q12. 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

Q13. 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

Q14. CPU performance is based on

- a) ALU width
- b) Clock speed
- c) **Number of instructions executed per second**
- d) How well CPU interacts with the rest of the system
- e) Both a and b
- f) None of the above

Q15. .profile file is present in

- a) /usr
- b) /usr/user1
- c) **/etc/admin**
- d) None of the above

Q16. 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

Q17. 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

Q18. . Which of the following devices is asynchronous ?

- a. SSRAM
- b. EPROM
- c. **Disk controllers**
- d. All of the above.

Q19. 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

Q20. 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**

Q21. The following is not a form of IPC

- a. Semaphore
- b. Pipe
- c. Shared memory
- d. **Buffering**

Q22. The fol. is a part of FAT

- a. **Sector info**
- b. Disk type
- c. Modified info
- d. Date info

Q23. Device files in UNIX are

- a. **Device drivers**
- b. Special files
- c. Pipes
- d. Unstructured files

Q24. The fol. Signal is sent by the DMA controller :

- a. HREQ
- b. **HLDA**
- c. DRQ

Q25.

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**

Q26. 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

Q27. 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**

Q28. 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

Q29. 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

Q30. The protected mode is necessary for -

- a) multi-tasking system
- b) multi-user system
- c) **both a and b**
- d) 16 bit programming

Q31. 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

Q32. 80286 the addressing scheme is _____ addressing

- a) 8 bit
- b) **16 bit**
- c) 24 bit
- d) 28 bit
- e) 32 bit

Q33. Shell executes \$0 and returns the

- a) Parameters entered in the command line
- b) **Program name**
- c) All of the above

Q34. 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

Q35. 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

Q36. . Which of the following operating systems is available for non-intel platforms ?

- a. Windows-NT
- b. **Solaris**
- c. **linux**
- d. all of the above

Q37. In the systems which do not have multiple CPUs, is the 'cache coherency' an issue while design?

- a. Yes
- b. **No**

Q38. The context of a process is the union of it's _____ .

- a. region tables, u area, system level context
- b. register context, pregon tables, user level context
- c. system-level context, register context, user-level context
- d. **process table, user-level context, register context**

Q39. 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.**

Q40. The first CPU with P6 architecture was -

- a) Pentium
- b) **Pentium Pro**
- c) Pentium II
- d) Pentium III

Q41. Which function is used to fetch password entry from password file

- a) getpass ()
- b) **getpwnam ()**
- c) getpasswd ()
- d) None

Q42. Which function is used to send a signal to a process

- a) kill (pid_t pid) ;
- b) send (pid_t pid, int signo) ;
- c) **kill (pid_t pid, int signo) ;**
- d) raise () ;

Q43. Select appropriate option for Round Robin Policy

- a) Heuristic Scheduling
- b) Priority Based Scheduling
- c) **Scheduling Algorithm specially for the time sharing system**
- d) Threaded Based Policy

Q44. tty command displays

- a) The host name
- b) The ip address of the terminal
- c) **The terminal no**
- d) The user on that terminal

Q45. In vi editor ,G command takes the cursor

- a) To the beginning of the file
- b) To the first line of the file
- c) **To the last line of the file**
- d) No where

Q46. In vi editor ctr + g displays

- a) The line no. with all the lines permanently
- b) The line no. with all the lines temporarily
- c) **The line no. of the current line**
- d) The line no. of the first line

Q47. To delete a variable and its value from the memory which command is used

- a) readonly variablename

- b) variablename = " "
- c) delete variablename
- d) unset variablename**

Q48. where will you find the essential programm in linux

- a) /home/user
- b) /user
- c) /etc
- d) /bin**

Q49. What sleep command does

- a) Kill the process
- b) To sleep a process for a specified no of seconds**
- c) Processes in the background in sleeping mode
- d) None of the above

Q50. what | (pipe) comand does

- a) Stores the output of one command into the file
- b) Sends the output of the command left as input to the command right**
- c) Sends the output of the command right as input to the command left
- d) None of the above

ANSWER KEY:

1. D
2. B
3. C
4. A
5. D
6. D
- 7.
8. C
9. D
10. C
11. C
12. C
13. A
14. C
15. C
16. C
17. B
18. C
19. B
20. D
21. D
22. A
23. A
24. B
25. D
26. A
27. D
28. B
29. C
30. C
31. C
32. B
33. B

- 34. N
- 35. N
- 36. B, C
- 37. D
- 38. D
- 39. D
- 40. B
- 41. B
- 42. C
- 43. C
- 44. C
- 45. C
- 46. C
- 47. D
- 48. D
- 49. B
- 50. B

- Q21. Banker's algorithm is an example of _____ avoidance. (**Deadlock**)
- Q22. _____ is forceful deallocation of a resource. (preemption)
- Q23. The _____ determines which process is to be executed next. (CPU Scheduling)
- Q24. Mutex is an acronym for _____. (mutual exclusion).
- Q25. A thread is a _____ process.
- Q26. SPOOLING stands for _____.
- Q27. The process of loading the OS into main memory is done by the _____.
- Q28. 64. _____, _____ are the two ways to achieve relocation and address translation. (paging, segmentation).
- Q29. A modified page is also called as _____ page. (dirty page).
- Q30. FAT stands for _____.

TRUE OR FALSE

- Q31. It is possible to have a deadlock involving only a single process. (False)
- Q32. Unix is a network operating system. (True)
- Q33. All entries in FAT correspond to clusters. (True)
- Q34. A Device controller is a piece of hardware. (False)
- Q35. Round Robin understands priority. (False)
- Q36. SJF is the best scheduling policy. (True)
- Q37. Paging allows protection. (False)
- Q38. A virus is a type of worm. (False)
- Q39. Ready queue in CPU scheduler is always a first-in, first-out (FIFO) queue. (False)
- Q40. 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. (True)

Q1. ____provides the interface between a process and the operating system

- (a) **System Call**
- (b) Kernal Call
- (c) I/O Call
- (d) OS Call

Q2. 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

Q3. A Process which is not waiting for any external event such as I/O Operation and which is not running is said to be in _____state

- (a) Blocked
- (b) **Ready**
- (c) Terminate
- (d) Wait

Q4. A _____ philosophy allows a higher priority process to replace a currently running process even if time slice is not over

- (a) Non preemptive
- (b) **Preemptive**
- (c) Rectangular Robin
- (d) Round Robin

Q5. A _____ systems allow the program to divided into different chunks and to be loaded at different portion of the memory

- (a) Contigious
- (b) **Non Contigious**
- (c) Paging
- (d) Non Paging

Q6. In _____ the memory chunks are of same size ,where as in _____ they can be of different sizes.

- (a) **Paging and Segmentation**
- (b) Segmentation and Paging
- (c) Contiguos and Non Contiguos
- (d) Non Contiguos and Contiguos

Q7. A _____ stores information related to a process and _____ stores information related to partitions.

- (a) **Process control block and Partion description table**
- (b) Partion description table and Process control block
- (c) Task controll block and Process control block

(d) Partion description table and Task controll block

Q8. A dirty bit is set if the page inside the main memory is _____

- (a) **Modified**
- (b) Replaced
- (c) Referenced
- (d) Un Referenced

Q9. A Process can change its state from blocked to running mode directly

- (a) True
- (b) **False**

Q10. In Paging logical or Virtual Address space of a program is divided into equal size pages and physical memory is also divided into equal size page frames

- (a) **TRUE**
- (b) False
- (c) System Dependent
- (d) Can't say

Q11. Unix follows the Ignore it strategy to deal with deadlocks

- (a) **True**
- (b) False

Q12. A process is said to thrashing if it is spending more time executing than paging

- (a) True
- (b) Can't say
- (c) **False**

Q13. The Least frequently used (L.F.U.)page replacement algorithm requires that the page with smallest count be replaced

- (a) **True**
- (b) False

Q14. A demand paging system is simmlar to a paging system with swapping

- (a) **True**
- (b) False

Q15. Select appropriate option for

Round Robin Policy

- (a) Heuristic Scheduling
- (b) Priority Based Sceduling
- (c) **Scheduling Algorithm specially for the time sharing system**
- (d) Threaded Based Policy

Q16. Select appropriate option for

First fit ,Best fit,Worst fit

- (a) **Strategies of partition allocation**
- (b) Deals with interprocess communication
- (c) Disk scheduling Algorithm
- (d) System Dependent

Q17. Select appropriate option for
Scan scheduling algorithm

- (a) Deals with interprocess communication
- (b) Scheduling Algorithm specially for the time sharing system
- (c) **Disk scheduling algorithm**
- (d) None of the above

Q18. Select appropriate option for
shortest job first algorithm

- (a) **Priority based scheduling**
- (b) Heuristic Scheduling
- (c) Disk Scheduling algorithm
- (d) Deals with interprocess communication

Q19. Select appropriate option for
Semaphores

- (a) **Deals with Inter process communication**
- (b) Heuristic Scheduling
- (c) Priority based scheduling
- (d) Threading based scheduling

Q20. Select appropriate option for Multi level feed back Queues

- (a) Priority based scheduling
- (b) **Heuristic Scheduling**
- (c) Disk Scheduling algorithm
- (d) Scheduling Algorithm specially for the time sharing system

Q21. Select appropriate option for Context Switch

- (a) Moving the process in and out of memory
- (b) Decides which of the ready process to be schedule next
- (c) Allows only a limited number of process in ready queue to complete for CPU
- (d) **Switching the Cpu to another process**

Q22. Select appropriate option for Swapping

- (a) **Moving the process in and out of memory**
- (b) Allows only a limited number of process in ready queue to complete for CPU
- (c) Decides which of the ready process to be schedule next
- (d) Switching the Cpu to another process

Q23. Select appropriate option for Short time scheduler

- (a) Switching the Cpu to another process

- (b) Moving the process in and out of memory
- (c) Decides which of the ready process to be schedule next**
- (d) None of the Above

Q24. ID - U displays

- (a) The user name
- (b) The user id**
- (c) The group name
- (d) The terminal name

Q25. tty command displays

- (a) The host name
- (b) The terminal no**
- (c) The ip address of the terminal
- (d) The user on that terminal

Q26. ls - a command displays

- (a) The names of the files and directories
- (b) The name of files only
- (c) The long listing of the file
- (d) The name of files & directories including hidden ones also**

Q27. sort file1>file2 will

- (a) Display the files (file1 & file2) in ascending order
- (b) Sort file1 in ascending order and store that output in file2**
- (c) Sort file2 in ascending order and store the output in file1
- (d) None of the above

Q28. kill command is used with

- (a) The processid of a running process**
- (b) The processid of a finished process
- (c) The userid
- (d) None of the above

Q29. ps - a command displays

- (a) Process owned by other user only
- (b) Process owned by current user only
- (c) Process owned by the current as well as other user also**
- (d) None

Q30. ps -r command displays

- (a) Process which are finished
- (b) Process which are running**
- (c) All process

Q31. To execute a process as a background process

- (a) Write background after process name
- (b) Terminate process with \$
- (c) **Terminate process with &**
- (d) None of the above

Q32. ln command is used to

- (a) **Create link of an existing file**
- (b) Copy a file
- (c) Remove the file
- (d) None of the above

Q33. grep - n "pattern " filename will display

- (a) The no. of lines who have this pattern.
- (b) The lines with line no. who match the pattern
- (c) Only the line numbers of the lines who match the pattern
- (d) **None**

Q34. In vi editor ,G command takes the cursor

- (a) To the beginning of the file
- (b) To the first line of the file
- (c) **To the last line of the file**

Q35. chmod command is used for

- (a) Change the permission of a file for the user
- (b) Change the permission of a file for the group
- (c) Change the permission of a file for the others
- (d) **All**

Q36. An operating system manages the _____ , _____ , _____ and _____ .Process

- (a) **Memory**
- (b) **File**
- (c) **Input/output**
- (d) None

Q37. The Three main states of the process are _____ , _____ and _____

- (a) **Ready**
- (b) **Running**
- (c) Suspend
- (d) **Waiting(blocked)**

Q38. The two basic scheduling policies are _____ and _____.

- (a) **Preemptive**
- (b) **Non preemptive**
- (c) Time
- (d) Wait

Q39. The process enter the system they are put in to a _____.

- (a) Ready Queue
- (b) Process Queue
- (c) **Job Queue.**

Q40. The short term scheduler is also known as _____.

- (a) **CPU Scheduler.**
- (b) Job Scheduler
- (c) File Scheduler