

Unix and Windows

1. Match the following for Unix file system:

List-I **List-II**

- a. Boot block i. Information about file system, free block list, free inode list etc.
b. Super block ii. Contains operating system files as well as program and data files created by users.
c. Inode block iii. Contains boot program and partition table.
d. Data block iv. Contains a table for every file in the file system. Attributes of files are stored here.

Codes:

- a b c d
(1) iii i ii iv
(2) iii i iv ii
(3) iv iii ii i
(4) iv iii i ii

Answer: 2

(UGCNET-DEC2016-III-51)

2. Unix command to change the case of first three lines of file "shortlist" from lower to upper

- (1) \$ tr '[a-z]' '[A-Z]' shortlist | head-3
(2) \$ head-3 shortlist | tr '[a-z]' '[A-Z]'
(3) \$ tr head-3 shortlist '[A-Z]' '[a-z]'
(4) \$ tr shortlist head-3 '[a-z]' '[A-Z]'

Answer: 2

(UGCNET-DEC2016-III-74)

3. Match the following vi commands in Unix:

List-I **List-II**

- a. :w i. saves the file and quits editing mode
b. :x ii. escapes unix shell
c. :q iii. saves file and remains in editing mode
d. :sh iv. quits editing mode and no changes are saved to the file

Codes:

- a b c d
(1) ii iii i iv
(2) iv iii ii i

(3) iii iv i ii

(4) iii i iv ii

Answer: 4

(UGCNET-DEC2016-III-75)

4. Which statement is not correct about “init” process in Unix?

(1) It is generally the parent of the login shell.

(2) It has PID 1.

(3) It is the first process in the system.

(4) Init forks and execs a ‘getty’ process at every port connected to a terminal.

Answer: 3

(UGCNET-DEC2016-III-54)

5. Consider the following operations to be performed in Unix:

“The pipe sorts all files in the current directory modified in the month of “June” by order of size and prints them to the terminal screen. The sort option skips ten fields then sorts the lines in numeric order.”

Which of the following Unix command will perform above set of operations?

(A) `ls -l | grep “June” | sort + 10n`

(B) `ls -l | grep “June” | sort + 10r`

(C) `ls -l | grep -v “June” | sort + 10n`

(D) `ls -l | grep -n “June” | sort + 10x`

Answer: A

(UGCNET-AUG2016-III-67)

6. Which of the following statement(s) is/are True regarding ‘nice’ command of UNIX?

I. It is used to set or change the priority of a process.

II. A process’s nice value can be set at the time of creation.

III. ‘nice’ takes a command line as an argument.

(A) I, II only (B) II, III only

(C) I, II, III (D) I, III only

Answer: C

(UGCNET-AUG2016-III-69)

7. The Unix Operating System Kernel maintains two key data structures related to processes, the process table and the user structure. Now, consider the following two statements:

I. The process table is resident all the time and contain information needed for all processes, even those that are not currently in memory.

II. The user structure is swapped or paged out when its associated process is not in memory, in order not to waste memory on information that is not needed.

Which of the following options is correct with reference to above statements ?

(A) Only (I) is correct.

(B) Only (II) is correct.

(C) Both (I) and (II) are correct.

(D) Both (I) and (II) are wrong.

Answer: C

13. Which of the following statement is not correct with reference to cron daemon in UNIX O.S?
- (A) The cron daemon is the standard tool for running commands on a pre-determined schedule.
 - (B) It starts when the system boots and runs as long as the system is up.
 - (C) Cron reads configuration files that contain list of command lines and the times at which they invoked.
 - (D) Crontab for individual users are not stored.

Answer: D

UGCNET-June2016-III-68

14. In Unix, files can be protected by assigning each one a 9-bit mode called rights bits. Now, consider the following two statements:
- I. A mode of 641 (octal) means that the owner can read and write the file, other members of the owner's group can read it, and users can execute only.
 - II. A mode of 100 (octal) allows the owner to execute the file, but prohibits all other access.
- Which of the following options is correct with reference to above statements?
- (A) Only I is correct
 - (B) Only II is correct
 - (C) Both I and II are correct
 - (D) Both I and II are incorrect

Answer: C

UGCNET-June2016-III-69

15. In Unix operating system, special files are used to :
- (A) buffer data received in its input from where a process reads
 - (B) provide a mechanism to map physical device to file names
 - (C) store list of file names plus pointers associated with i-nodes
 - (D) store information entered by a user application program or utility program

Answer: B

UGCNET-Dec2015-III-40

16. Match the following in Unix file system :

List - I

- (a) Boot block
- (b) Super block
- (c) Inode table
- (d) Data block

List - II

- (i) Information about file system
- (ii) Information about file
- (iii) Storage space
- (iv) Code for making OS ready

Codes :

- (a) (b) (c) (d)
- (A) (iv) (i) (ii) (iii)
- (B) (i) (iii) (ii) (iv)
- (C) (iii) (i) (ii) (iv)
- (D) (iv) (ii) (i) (iii)

Answer: A

UGCNET-Dec2015-III-41

17. The character set used in Windows 2000 operating system is
- (A) 8 bit ASCII
 - (B) Extended ASCII

(C) 16 bit UNICODE (D) 12 bit UNICODE

Answer: C

UGCNET-Dec2015-III-55

18. In Unix, the command to enable execution permission for file "mylife" by all is

(A) Chmod ugo+X myfile (B) Chmod a+X myfile

(C) Chmod +X myfile (D) All of the above

Answer: D

UGCNET-Dec2015-III-56

19. What will be the output of the following Unix command ?

\$rm chap0\[1 - 3\]

(A) Remove file chap0[1 - 3]

(B) Remove file chap01, chap02, chap03

(C) Remove file chap\[1 - 3\]

(D) None of the above

Answer: A

UGCNET-Dec2015-III-57

20. A unix file may be of type:

(A) Regular file (B) Directory File

(C) Device File (D) Any one of the above

Answer: D

UGCNET-June2015-III-54

21. The Unix command:

\$ vi file1 file2

(A) Edits file1 and stores the contents of file1 in file2

(B) Both files i.e. file1 and file2 can be edited using 'ex' command to travel between files

(C) Both files can be edited using the 'mv' command to move between the files

(D) Edits file1 first, saves it and the edits file2

Answer: B

UGCNET-June2015-III-75

22. WOW32 is a:

(A) Win 32 API library for creating processes and threads.

(B) Special kind of file system to the NT name space.

(C) Kernel - mode objects accessible through Win32 API

(D) Special execution environment used to run 16 bit Windows applications on 32 - bit machines.

Answer: D

UGCNET-June2015-III-74

23. Match the following for unix system calls:

List-I

(a) exec

List-II

(i) Creates a new process

- (b) brk (ii) Invokes another program overlaying memory space with a copy of an executable file
(c) wait (iii) To increase or decrease the size of data region
(d) fork (iv) A process synchronizes with termination of child process

Codes:

- (a) (b) (c) (d)
(A) (ii) (iii) (iv) (i)
(B) (iii) (ii) (iv) (i)
(C) (iv) (iii) (ii) (i)
(D) (iv) (iii) (i) (ii)

Answer: A

UGCNET-June2015-III-73

24. Which of the following versions of Windows O.S. contain built-in partition manager which allows us to shrink and expand pre-defined drives ?

- (A) Windows Vista (B) Windows 2000
(C) Windows NT (D) Windows 98

Answer: A

UGCNET-Dec2014-III-73

25. maintains the list of free disk blocks in the Unix file system.

- (A) I-node
(B) Boot block
(C) Super block
(D) File allocation table

Answer: C

UGCNET-June2014-III-37

26. A part of Windows 2000 operating system that is not portable is

- (A) Device Management
(B) Virtual Memory Management
(C) Processor Management
(D) User Interface

Answer: B

UGCNET-June2014-III-38

27. The output generated by the LINUX command :

\$ seq 1 2 10

will be

- (A) 1 2 10
(B) 1 2 3 4 5 6 7 8 9 10
(C) 1 3 5 7 9
(D) 1 5 10

Answer: C

UGCNET-June2014-III-46

28. Match the following with reference to Unix shell scripts :

List – I List – II

- a. \$? i. File name of the current script
- b. \$# ii. List of arguments
- c. \$0 iii. The number of arguments
- d. \$* iv. Exit status of last command

Codes :

- a b c d
- (A) iii ii i iv
- (B) ii iii i iv
- (C) iv iii i ii
- (D) i iii i iv

Answer: C

29. Possible thread states in Windows 2000 operating system include:

- (A) Ready, running and waiting
- (B) Ready, standby, running, waiting, transition and terminated.
- (C) Ready, running, waiting, transition and terminated
- (D) Standby, running, transition and terminated.

Answer: B

UGCNET-Dec2013-III-75

30. Which statement is not true about process 0 in the Unix operating system?

- (A) Process 0 is called init process.
- (B) Process 0 is not created by fork system call.
- (C) After forking process 1, process 0 becomes swapper process.
- (D) Process 0 is a special process created when system boots.

Answer: A

UGCNET-Dec2013-III-73

31. Which of the following commands would return process_id of sleep command?

- (A) Sleep 1 and echo \$?
- (B) Sleep 1 and echo \$#
- (C) Sleep 1 and echo \$x
- (D) Sleep 1 and echo \$!

Answer: D

UGCNET-Dec2013-III-74

32. The directory structure used in Unix file system is called

- (A) Hierarchical directory
- (B) Tree structured directory
- (C) Directed acyclic graph
- (D) Graph structured directory

Answer: C

UGCNET-Dec2013-III-72

33. In Unix, how do you check that two given strings a and b are equal ?

- (A) test \$a -eq \$b
- (B) test \$a -equal \$b

- (C) test \$a=\$b
- (D) Sh -C test \$a==\$b

Answer: C

UGCNET-Dec2013-III-67

34. In windows 2000 operating system all the processor-dependent code is isolated in a dynamic link library called
- A. NTFS file system
 - B. Hardware abstraction layer
 - C. Microkernel
 - D. Process Manger

Answer B

UGCNET-Dec2013-III-68

35. Which of the following statements is not true for UNIX Operating System?
- (A) Major strength of UNIX Operating System is its open standards which enabled large number of organizations ranging from academia to industries to participate in its development.
 - (B) UNIX kernel uses modules with well specified interfaces and provides advantages like simplified testing and maintenance of kernel. It has better extensibility as the kernel is not monolithic.
 - (C) UNIX is kernel based operating system with two main components viz. process management subsystem and file management subsystem.
 - (D) All devices are represented as files which simplify the management of I/O devices and files. The directories structure used is directed acyclic graph.

Answer: B

UGCNET-Sep2013-III-75

36. Match the following for Windows Operating System :

List - I

- (a) Hardware abstraction layer
- (b) Kernel
- (c) Executive
- (d) Win32 subsystem

List - II

- (i) Starting all processes, emulation of different operating systems, security functions, transform character based applications to graphical representation.
- (ii) Export a virtual memory interface, support for symmetric multiprocessing, administration, details of mapping memory, configuring I/O buses, setting up DMA.
- (iii) Thread scheduling, interrupt and exception handling, recovery after power failure.
- (iv) Object manager, virtual memory manager, process manager, plug and-play and power manager.

Codes :

- (a) (b) (c) (d)
- (A) (i) (iii) (ii) (iv)
- (B) (iv) (iii) (ii) (i)
- (C) (ii) (iii) (iv) (i)

(D) (iii) (ii) (i) (iv)

Answer: C

UGCNET-Sep2013-III-74

37. Which of the following shell scripts will produce the output “my first script”?

(A) for i in my first script { echo -i \$i }

(B) for my first script; do echo -n; done

(C) for i in my first script; do echo -i \$i; done

(D) for n in my first script; do echo -i \$i; done

Answer: C

UGCNET-Sep2013-III-72

38. The portion of Windows 2000 operating system which is not portable is

(A) processor management

(B) user interface

(C) device management

(D) virtual memory management

Answer: D

UGCNET-June2014-III-38

39. (I) Each object in the active directory of windows 2000 has an access control list.

(II) The scheme is a blueprint of all objects in the domain of windows 2000.

Which of the following is true?

(A) only (I)

(B) only (II)

(C) both (I) and (II)

(D) none of the above

Answer: C

UGCNET-dec2008-ii-50

40. In Unix, the login prompt can be changed by changing the contents of the file

(A) contrab (B) init

(C) gettydefs (D) inittab

Answer: C

UGCNET-Dec2015-II-30

41. A unix file system has 1-KB blocks and 4-byte disk addresses. What is the maximum file size if i-nodes contain 10 direct entries and one single, double and triple indirect entry each?

(A) 32 GB (B) 64 GB

(C) 16 GB (D) 1 GB

Answer: C

UGCNET-June2013-III-64, UGCNET-Dec2015-II-49

42. What does the following command do?

grep -vn “abc” x

- (A) It will print all of the lines in the file x that match the search string “abc”
- (B) It will print all of the lines in file x that do not match the search string “abc”
- (C) It will print total number of lines in the file x that match the search string “abc”
- (D) It will print the specific line numbers of the file x in which there is a match for string “abc”

Answer: B

UGCNET-June2015-II-38

43. The Unix Kernel maintains two key data structures related to processes, the process table and the user structure. Which of following information is not the part of user structure?

- (A) File descriptor table
- (B) System call state
- (C) Scheduling parameters
- (D) Kernel stack

Answer: C

UGC net paper II june-2015 No 40

44. In UNIX, creates three subdirectories: 'PIS' and two subdirectories 'progs' and 'data' from just created subdirectory 'PIS'.

- (A) mdkir PIS/progs PIS/data PIS
- (B) mkdir PIS progs data
- (C) mkdir PIS PIS/progs PIS/data
- (D) mkdir PIS/progs data

Answer: C

UGCNET-June2016-II-39

45. Assume that an implementation of Unix operating system uses i-nodes to keep track of data blocks allocated to a file. It supports 12 direct block addresses, one indirect block address and one double indirect block address. The file system has 256 bytes block size and 2 bytes for disk block address. The maximum possible size of a file in this system is

- (A) 16 MB
- (B) 16 KB
- (C) 70 KB
- (D) 71 KB

Answer: Marks given to all

UGCNET-Sep2013-II-47

46. Which of the following set of Unix commands will always display “WELCOME” ?

- (A) export title=WELCOME; Echo \$title
- (B) title = WELCOME; export \$ title ; sh -c “echo \$title”
- (C) title = WELCOME; export title ; sh -c “echo \$title”
- (D) title = WELCOME; echo \$title

Answer: C

2013 September UGC NET Solved Paper II No 48

47. Consider the following UNIX command:

sort <in> temp; head -30 <temp; rm temp

Which of the following functions shall be performed by this command?

- (A) Sort, taking the input from "temp", prints 30 lines from temp and delete the file temp
- (B) Sort the file "temp", removes 30 lines from temp and delete the file temp

(C) Sort, taking the input from "in" and writing the output to "temp" then prints 30 lines from temp on terminal. Finally "temp" is removed.

(D) Sort, taking the input from 'temp' and then prints 30 lines from "temp" on terminal. Finally "temp" is removed.

Answer: C

48. The *mv* command changes

(A) the inode

(B) the inode-number

(C) the directory entry

(D) both the directory entry and the inode

Answer: C

UGCNET-June2013-II-50 unix

49. In UNIX, which of the following command is used to set the task priority ?

(A) init

(B) nice

(C) kill

(D) PS

Answer B

UGCNET-Dec2012-II-36

50. The Unix command used to find out the number of characters in a file is

(A) nc

(B) wc

(C) chcnt

(D) lc

Answer: B

UGCNET-dec2009-ii-40

51. An example of a memory management system call in UNIX is:

(A) fork.

(B) mmap.

(C) sigaction.

(D)execve.

Answer: B

UGC NET Computer Science Paper-2 June 2008 No 38

52. The "nice" command is used in Unix:

(A) to decrease the priority of a process

(B) to increase the priority of a process

(C) to get the highest priority

(D) nothing to do with the priorities

Answer: A, B

UGC NET Computer Science Paper-2 June 2007 No 38

53. Which of the following is not an Unix Command ?

(A) Whoami

(B) wc

(C) ls

(D) put

Answer: D

UGC NET Paper II June 2005 No 40

54. A UNIX file system has 1 KB block size and 4-byte disk addresses. What is the maximum file size if the inode contains ten direct block entries, one single indirect block entry, one double indirect block entry and one triple indirect block entry?

(A) 30 GB (C) 16 GB

(B) 64 GB (D) 1 GB

Answer: C

UGCNET-June2013-III-64, UGCNET-Dec2015-II-49

55. A UNIX file system has 1 KB block size and 4-byte disk addresses. What is the maximum file size if the inode contains ten direct block entries, one single indirect block entry, one double indirect block entry and one triple indirect block entry?

(A) 30 GB

(B) 64 GB

(C) 16 GB

(D) 1 GB

Answer: C

UGCNET-June2013-III-64, UGCNET-Dec2015-II-49

56. Which of the following operating system is better for implementing client-server network?

(A) Windows 95

(B) Windows 98

(C) Windows 2000

(D) All of these

Answer: C

UGCNET-Dec2012-III-40

57. A user level process in Unix traps the signal sent on a Ctrl + C input and has a signal handling routine that saves appropriate files before terminating the process. When a Ctrl + C input is given to this process, what is the mode in which the signal handling routine executes?

(A) User mode

(B) Kernel mode

(C) Superuser mode

(D) Privileged mode

Answer: B

GATE2005-IT-19, UGCNET-June2012-III-57

58. Which one of the following options is not a shell in UNIX system?

(A) Bourne Shell

(B) C Shell

- (C) Net Shell
 - (D) Korn Shell
- Answer: C

59. What is the meaning of 'Hibernate' in Windows XP/Windows 7?
- (A) Restart the computers in safe mode.
 - (B) Restart the computers in normal mode.
 - (C) Shutdown the computer terminating all the running applications.
 - (D) Shutdown the computer without closing the running applications.

Answer: D

UGCNET-June2012-III-69

60. The versions of windows operating system like windows XP and window Vista uses following file system:
- (A) FAT-16
 - (B) FAT-32
 - (C) NTFS (NT File System)
 - (D) All of the above

Answer: D

UGCNET-June2013-III-66

61. Which command allows you to view your file 24 lines at a time ?
- (A) More
 - (B) Cat
 - (C) Pg
 - (D) None of the above

Answer: A

62. Which of the following command the file names in multiple columns?
- (A) IS-X
 - (B) IS
 - (C) IS-1
 - (D) IS-f-X

Answer: B

UGCNET-Dec2010-II-37

63. WINDOWS is a operating.
- (A) Real time
 - (B) Multi-user
 - (C) Preemptive
 - (D) Non-preemptive

Answer: C

ugc net 2007

64. What is the size of the Unicode character in Windows Operating System ?
- (A) 8-Bits
 - (B) 16-Bits

(C) 32-Bits (D) 64-Bits

Answer: B

UGCNET-Dec2012-II-15

65. Which of the following changes permission to deny write permission to group and others?

- (A) Chmod go-w filex
- (B) Chmod go w filex
- (C) Chmod go=w filex
- (D) None of the above

Answer: A

UGCNET-june2009-ii-37

66. Variable partition memory management technique with compaction results in:

- (A) Reduction of fragmentation
- (B) Minimal wastage
- (C) Segment sharing
- (D) None of the above

Answer: A

UGCNET-june2009-ii-38

67. An example of a directory found in most UNIX system is:

- (A) usr (B) waitpid
- (C) brk (D) unmap

Answer: A

UGC NET Computer Science Solved Paper II DECEMBER 2007 NO 39

68. Windows is a operating system.

- (A) Non pre-emptive
- (B) Pre-emptive
- (C) Multi-user
- (D) Real time

Answer: C

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69. Linux operating system uses

- (A) Affinity Scheduling
- (B) Fair Preemptive Scheduling
- (C) Hand Shaking
- (D) Highest Penalty Ratio Next

Answer: B

UGCNET-Dec2013-II-50