

PRINT Name: _____ LAB Section:

Test Version: ____ One-Answer Multiple Choice 48 Questions – 25 of 25%

- ☞ Read **all** the words of these instructions and **both** sides (back and front) of all pages.
- ☞ Use your full, unabbreviated name on the mark-sense form. Do not abbreviate your name.
- ☞ Put the three-digit **Test Version** above into **NO. OF QUESTIONS** and **NO. OF STUDENTS**
- ☞ Fill in the bubbles with pencil only, no pen. Enter your NAME, Test Version, and answers.
- ☞ Manage your time. Answer questions you know, first. One Answer per question.
- ☞ The answer to the last question about reading all these Test Instructions is: **Tak**

1. [14/69] In an empty directory, how many words are in file **out** after this command line: `echo 1 2 3 >a 4 ; mv a b ; ls >out`
 a. 2 b. 4 c. 1 d. 0 e. 3
2. [22/69] Given my directory **dir** and my file **dir/foo** owned by me, which permissions allow me to access and change or create new content (data) in the file **dir/foo** but not delete the file?
 a. 100 on directory, 500 on file b. 500 on directory, 500 on file
 c. 300 on directory, 600 on file d. 500 on directory, 600 on file
 e. 300 on directory, 400 on file
3. [24/69] How many arguments are passed to the command by the shell:
`<f z " a 'b c' d " 1 2 ' g " h " ' >z`
 a. 2 b. 5 c. 4 d. 6 e. 3
4. [25/69] Given my directory **dir** and my file **dir/foo** owned by me, which permissions allow me to delete the file **dir/foo** from the directory, but not change the content (data) in the file?
 a. 300 on directory, 300 on file b. 600 on directory, 500 on file
 c. 500 on directory, 500 on file d. 600 on directory, 200 on file
 e. 300 on directory, 400 on file
5. [25/69] What type and permissions result from this command line:
`umask 362 ; touch newfile ; ls -l newfile`
 a. `-r-----xr-x` b. `--wxr-x-w-` c. `--wxrw--w-`
 d. `-r-----r--` e. `--wx---r--`

6. [26/69] If file **a** contains 2 lines, and file **b** contains 3 lines, then how many lines are in file **c** after this command line:
`ln a d ; ln d c ; cat a b >c`
 a. 0 b. 2 c. 4 d. 5 e. 3
7. [27/69] If file **a** contains 2 lines, and file **b** contains 3 lines, then how many lines are in file **c** after this command line:
`ln a d ; ln b e ; cp d e >c`
 a. 4 b. 5 c. 2 d. 0 e. 3
8. [30/69] If file **a** contains 2 lines, and file **b** contains 3 lines, then how many lines are in file **c** after this command line:
`cat a b >c ; cat a >>b ; sort c b >c a`
 a. 5 b. 8 c. 7 d. 12 e. 0
9. [30/69] In an empty directory, what is the output on your screen after this command line: `echo hi >a ; mv a b ; ln b c ; ls >wc -l`
 a. 2 b. no output c. 0
 d. a e. 1
10. [31/69] What is true about this output from `ls -il foo bar`?
`454 -rwxr-xr-x 3 me me 2 Dec 4 9:12 foo`
`454 -rw-r--r-- 3 me me 2 Dec 4 9:12 bar`
 a. **foo** and **bar** are names for the same file
 b. **foo** and **bar** are two of three names for this file
 c. **foo** and **bar** are names for different files
 d. **foo** and **bar** each have three names (six names total)
 e. this output is not possible
11. [32/69] In an empty directory, what is in file **out** after this command line:
`echo out >out ; ls nosuchfile | wc -l >out`
 a. nothing (empty file) b. **nosuchfile**
 c. **out** d. 1
 e. 0
12. [32/69] What is in file **c** after these successful commands?
`echo A >a ; ln a b ; echo B >b ; ln a c ; rm a b`
 a. **A** followed by **B** b. **A**
 c. **B** d. no such file (nonexistent)
 e. nothing (empty file)

13. [32/68] What is the link count of directory **d** after these successful commands?
`mkdir d d/a d/b d/c d/c/z ; touch d/x d/y`
 a. 4 b. 5 c. 6 d. 2 e. 3
14. [33/69] What is true about this output from `ls -il foo bar`?
`454 -rwxr-xr-x 3 me me 2 Dec 4 9:12 foo`
`456 -rwxr-xr-x 3 me me 2 Dec 4 9:12 bar`
 a. **foo** and **bar** each have two names (four names total)
 b. **foo** and **bar** are two of three names for this file
 c. this output is not possible
 d. **foo** and **bar** are names for the same file
 e. **foo** and **bar** each have three names (six names total)
15. [34/69] What is the link count of file **f** after these successful commands?
`rm f ; touch f ; ln f b ; cp f c`
`cp b x ; ln x y ; ln b z ; ln z a`
 a. 1 b. 3 c. 5 d. 4 e. 2
16. [34/69] In an empty directory, what is the output on your screen after this command line: `echo hi >a ; mv a b ; ls | wc -w`
 a. 2 b. a c. no output
 d. 0 e. 1
17. [36/69] What is the link count of file **f** after these successful commands?
`rm f ; touch f ; ln f a ; ln a b`
`cp f c ; ln c x ; rm b ; mv a b`
 a. 4 b. 1 c. 3 d. 2 e. 0
18. [37/69] If my current directory is **/bin**, which of these pathnames is equivalent to the file name **/bin/ls**?
 a. **./bin/ls** b. **/ls**
 c. **../bin/ls/.** d. **ls**
 e. **/root/bin/ls**
19. [37/69] What is the link count of file **f** after these successful commands?
`rm f ; touch f ; ln f b ; cp f g`
`cp b a ; ln a d ; ln b c ; cp c g`
 a. 4 b. 3 c. 1 d. 2 e. 5

20. [37/69] In an empty directory, what is the output on your screen of this command line: `echo hi >foo >bar ; cat foo`
 a. **hi >foo**
 b. **cat: foo: No such file or directory**
 c. **hi >foo >bar**
 d. **hi**
 e. no output
21. [38/69] Which command line displays all the non-hidden names in the current directory that contain the letter **a** (and no others)?
 a. **echo [a]** b. **echo *a*** c. **echo a***
 d. **echo *a** e. **echo ?a?**
22. [40/69] If file **a** occupies one disk block, how many disk blocks are in use after this sequence of commands:
`cp a b ; ln b c ; cp c d ; ln c e`
 a. 3 blocks b. 5 blocks c. 1 block
 d. 2 blocks e. 4 blocks
23. [40/69] If my current working directory is **/bar**, which command copies the password file into directory **/bar/me** under the name **foo**?
 a. **cp ../me/../../etc/passwd ../bar/me/foo**
 b. **cp ../bar/./me/../../etc/passwd ./me/./foo**
 c. **cp me/../../etc/passwd ./me/foo**
 d. **cp ../../etc/./passwd /me/foo**
 e. **cp ../etc/passwd ../me/foo**
24. [40/69] Which command line displays all the non-hidden names in the current directory that contain the case-insensitive word **go** (and no others)?
 a. **echo *[go]*** b. **echo *[GgOo]***
 c. **echo ?[GgOo]?** d. **echo *[go][GO]***
 e. **echo *[Gg][Oo]***
25. [41/69] Which command below removes *only* this four-character file name containing a special character (and no others): ***foo**
 a. **rm /*foo** b. **rm .//*foo** c. **rm *foo**
 d. **rm ?foo** e. **rm *foo**

26. [42/69] What is the output on your screen after this command line:
`mkdir d ; touch d/.aa d/.bb ; echo d/*`
 a. no output
 b. `d/.aa d/.bb`
 c. `d/ d/.. d/.aa d/.bb`
 d. `d/`
 e. `d/*`
27. [43/69] If my current directory is `/etc`, which of these pathnames is equivalent to the pathname `/etc/x/y`?
 a. `../etc/./y`
 b. `../etc/x/y`
 c. `./etc/x/y`
 d. `../x/y`
 e. `/x/y`
28. [44/69] If I have a directory named `a/d`, which action would increase its link count by exactly one?
 a. create a file named `a/d2`
 b. create a hard link to directory `d` named `d2`
 c. create a directory named `a/d2`
 d. create a file named `a/d/e`
 e. create a directory named `a/d/e`
29. [44/69] Given this `ls -il` long listing:
`454 drwxr-xr-x 123 me me 456 Dec 4 9:12 dir`
 How many subdirectories lie immediately under `dir`?
 a. 121
 b. 458
 c. 123
 d. 456
 e. 454
30. [44/68] If file `foo` contains 9 lines, each of which is the one-digit line number of the line in the file (1 through 9), what is the output on your screen of this command: `sort foo foo | tail -3 | head -1`
 a. 8
 b. 9
 c. 1
 d. 2 2
 e. 8 8
31. [45/69] In an empty directory, what is the output on your screen after this command line: `date >.foo >.bar ; ls *`
 a. `.foo .bar`
 b. `. .. .foo .bar`
 c. an error message from `ls` saying `* does not exist`
 d. `*`
 e. no output
32. [45/69] What is the correct syntax to redirect both standard output and standard error into the same output file?
 a. `ls 1>out 2>1`
 b. `ls 2>&1 >out`
 c. `ls 2>1 >out`
 d. `ls >out 2>&1`
 e. `ls 1>out 2>out`

33. [46/69] Which of these command line will make file `c` contain all of the content of file `a` followed by all of the content of file `b`?
 a. `ln a b >c`
 b. `echo a b >c`
 c. `cp a b >c`
 d. `cat a b >c`
 e. `mv a b >c`
34. [47/69] If I am in directory named `/home/me` and `dir` is an empty sub-directory, what is true after this command line:
`touch new ; mv ./dir/./new ../me/old`
 a. the command fails because the path `./dir/./new` does not exist
 b. the directory `dir` now contains only a file named `old`
 c. the command fails because the path `../me/old` does not exist
 d. there is a second copy of the file `new` in the file named `old`
 e. the parent directory of `dir` now has a file named `old` in it
35. [47/69] If you type the command `cat`, which CTRL key will send an EOF and take you back to the command prompt?
 a. `^C`
 b. `^E`
 c. `^D`
 d. `^U`
 e. `^R`
36. [47/69] What is true about this output from `ls -il foo bar`
`454 -rwxr-xr-x 3 me me 2 Dec 4 9:12 foo`
`456 -rwxr-xr-x 3 me me 2 Dec 4 9:12 bar`
 a. this output is not possible
 b. `foo` and `bar` are two of three names for this file
 c. `foo` and `bar` are names for the same file
 d. `foo` and `bar` each have two names (four names total)
 e. `foo` and `bar` are names for different files
37. [47/69] What type and permissions result from this command line:
`umask 156 ; mkdir newdir ; ls -ld newdir`
 a. `dr-x-w-rw-`
 b. `drw--w----`
 c. `d--xr-xrw-`
 d. `dr-x--x---`
 e. `drw--w---`
38. [47/69] In an empty directory, what is the output on your screen after this command line: `echo hi >a ; ls nosuchfile 2>/dev/null`
 a. `ls: 2>/dev/null: No such file or directory`
 b. `a`
 c. no output
 d. `ls: nosuchfile: No such file or directory`
 e. `nosuchfile`

39. [47/69] If file **a** contains 2 lines, and file **b** contains 3 lines, then how many lines are output on your screen by this command line: `sort a | head b`
- 5
 - no output
 - 0
 - 3
 - 2
40. [49/69] If **foo** is a sub-directory that contains only the file **bar**, what happens after this command: `mv ./foo/bar foo/./moo`
- the directory **foo** is now empty
 - the command fails because the name **moo** does not exist
 - the command fails because the name **foo/./moo** does not exist
 - the directory **foo** now contains only a file named **moo**
 - there is a second copy of the file **bar** in the file named **moo**
41. [51/69] What is true about this output from `ls -il foo bar`
- ```
454 -rwxr-xr-x 2 me me 3 Dec 4 9:12 foo
454 -rwxr-xr-x 2 me me 3 Dec 4 9:12 bar
```
- this output is not possible
  - foo** and **bar** are names for the same file
  - foo** and **bar** each have two names (four names total)
  - foo** and **bar** are two of three names for this file
  - foo** and **bar** are names for different files
42. [51/69] How many words are in file **out** after this command line:
- ```
echo one >two >three >out
```
- 4
 - 1
 - 0
 - 2
 - 3
43. [53/69] Which of these commands makes a file owned by me, also executable by me?
- `umask 100 f`
 - `chmod u+x f`
 - `chmod x=u f`
 - `chmod x+u f`
 - `umask 700 f`
44. [54/69] If I am in directory named `/home/me` and **mt** is an empty sub-directory, what is true after this command line:
- ```
touch ../me/foo ; cp ./mt/./foo ./mt/./bar
```
- the directory **mt** now contains two files
  - the command fails because the path `./mt/./foo` does not exist
  - the directory **mt** is still empty
  - the file named **foo** is now renamed to **bar**
  - the directory **mt** now has a file named **bar** in it

45. [55/68] If **foo** is a sub-directory that contains only the file **bar**, what happens after this command: `mv foo/bar foo/./cat`
- the directory **foo** is now empty
  - there is a second copy of the file **bar** in the file named **cat**
  - the directory **foo** now contains only a file named **cat**
  - the command fails because the name **foo/./cat** does not exist
  - the command fails because the name **cat** does not exist
46. [59/69] If **dir** is a sub-directory that contains only the file **bar**, what happens after this command: `mv dir/bar dir/foo`
- the command fails because the name **foo** does not exist
  - there is a second copy of the file **bar** in the file named **foo**
  - an empty file named **foo** is created
  - there is only the file named **foo** in the directory now
  - the command fails because **bar** is not a directory
47. [61/69] In the output of `ls -a`, a dot (period) that *begins* any name signifies what?
- the current directory
  - an unprintable character
  - a current file
  - a name that is hidden
  - the parent directory
48. [65/66] **Did you read ALL the words** of the test instructions on the first page?
- Jes** (*Yes – Esperanto*)
  - Tak** (*Yes – Polish*)
  - Igen** (*Yes – Hungarian*)
  - Yes** (*Yes – English*)
  - Sim** (*Yes – Portuguese*)