

Evaluation: 40 Questions

Name: _____

Important Instructions

1. Manage your time when answering questions on this test.
2. Answer the questions you know, first.
3. Read all instructions and both sides of all pages.

One Mark Correct Answers are worth one mark each.

Zero Marks Unanswered questions are worth zero marks.

Minus 0.25 Marks Incorrect Answers are worth -0.25 (minus one quarter) mark each. Incorrect guesses will be partially subtracted from your overall score.

(Office use only: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40)

1. In the output of the command `ls -a`, a dot that begins a name signifies what?
 - † a. A name that is hidden.
 - b. The parent directory.
 - c. The current directory.
 - d. A current file.
 - e. A name with an unprintable character.
2. If you type the command `sleep 60` which of the following key sequences will interrupt it and take you immediately back to the command prompt?
 - † a. [CTRL-C]
 - b. [CTRL-D]
 - c. [CTRL-I]
 - d. [CTRL-U]
 - e. [CTRL-R]
3. Which command below removes *only* this four-character file name containing a special character (and no others): `abc*`
 - † a. `rm abc*`
 - b. `rm abc/*`
 - c. `rm abc*`
 - d. `rm abc//*`
 - e. `rm abc*`
4. Which command below removes *only* this four-character file name containing a special character (and no others): `?xyz`
 - † a. `rm '?xyz'`
 - b. `rm ?xyz`
 - c. `rm '?xyz'`
 - d. `rm ''?xyz''`
 - e. `rm ''?xyz`

5. How many arguments are there to this `echo` command:


```
echo ' one two ' three ' four ' 5'6'
```

 - † a. Four arguments.
 - b. Five arguments.
 - c. Six arguments.
 - d. One argument.
 - e. Nine arguments.
6. If `foo` is a sub-directory that contains only the file `single`, what happens after this command: `mv ./foo/single foo/../double`
 - † a. the directory `foo` is now empty
 - b. the directory `foo` now contains only a file named `double`
 - c. there is a second copy of the file `single` in the file named `double`
 - d. the command fails because the name `double` does not exist
 - e. the command fails because the name `foo/../double` does not exist
7. If I have a directory owned by me named `/a/b/c/d`, which of the following actions would increase its *link count* by exactly one?
 - † a. create one subdirectory named `/a/b/c/d/e`
 - b. create one subdirectory named `/a/b/c/d`
 - c. create one subdirectory named `/a/b/c/d2`
 - d. create one file named `/a/b/c/d/e`
 - e. create one file named `/a/b/c/d2`
8. Which of the following is true, given this long directory listing:


```
drwxr-x--x 71 ian user 512 May 30 12:35 dir
```

 - † a. The number 71 is the count of links (names) this directory has.
 - b. The number 71 is the inode number of this directory.
 - c. The number 71 is the size of this directory.
 - d. The number 512 is the count of links (names) this directory has.
 - e. The number 512 is the inode number of this directory.
9. Given an existing file of yours named `/a/x`, what is the output of this sequence of three shell commands:


```
echo hi >/a/x ; wc /a/x >/a/x ; cat /a/x
```

 - † a. 0 0 0 /a/x
 - b. 1 1 3 /a/x
 - c. 1 1 2 /a/x
 - d. 2 2 4 /a/x
 - e. no output

10. Given an existing file of yours named `/a/x`, what is the output of this sequence of three shell commands:

```
echo hi >/a/x ; sort /a/x >/a/x ; wc /a/x
```

- † a. 0 0 0 /a/x
 - b. 1 1 3 /a/x
 - c. 1 1 2 /a/x
 - d. 2 2 4 /a/x
 - e. no output
11. Which of the following statements is true about this shell command line:
- ```
<foo cat bar
```
- † a. The command `cat` sees only one argument.
  - b. The command `cat` sees two arguments.
  - c. The command `foo` sees only one argument
  - d. The command `foo` sees two arguments.
  - e. The command is always invalid.
12. Which of the following shell command lines displays only the names in the current directory that are exactly three letters (alphabetic) long?
- † a. `echo [a-zA-Z][a-zA-Z][a-zA-Z]`
  - b. `echo [0-3][0-3][0-3]`
  - c. `echo [?][?][?]`
  - d. `echo ???`
  - e. `echo ***`
13. If directory `/a` contains these seven two-character file names: `aa`, `ab`, `ac`, `ad`, `a?`, `a*`, `a.`, then which shell command below will remove only the single name `a?` from the directory (and no others)?
- † a. `rm /a/a\?`
  - b. `rm /a/a?`
  - c. `rm /a/a*`
  - d. `rm /a/a[*]`
  - e. `rm /a/?`
14. If directory `/a/b` contains these four three-character file names: `.aa`, `.ab`, `.a?`, `.a*`, then what is the output of the following `bash` shell command line: `echo /a/b/???`
- † a. `/a/b/???`
  - b. `/a/b/.aa /a/b/.ab /a/b/.a? /a/b/.a*`
  - c. `/a/b/.aa /a/b/.ab`
  - d. `/a/b/.a?`
  - e. no output

15. What is the `bash` shell output of this two command sequence:

```
PATH=/etc/passwd ; ls nosuchfile
```

- † a. `bash: ls: command not found`
  - b. `ls: /bin/ls: command not found`
  - c. `bash: /bin/cat: command not found`
  - d. `bash: /etc/passwd: No such file or directory`
  - e. `ls: nosuchfile: No such file or directory`
16. Which line below passes three *separate* arguments to the `sort` command when placed inside a shell script named `foo` invoked by the command line:
- ```
./foo a b c
```
- † a. `sort "$@"`
 - b. `sort "$*"`
 - c. `sort "$#"`
 - d. `sort "$1 $2 $3"`
 - e. `sort "$? $? $?"`
17. Given the following `bash` shell command line: `read a b c`, which user keyboard input line below will assign the text `b` to the shell variable named `b`?
- † a. `a b c`
 - b. `a=a b=b c=c`
 - c. `a,b,c`
 - d. `a:b:c`
 - e. `a;b;c`
18. What is the `bash` shell output of this two-command sequence if run in a directory containing 9999 files with names that are all the numbers from `1` to `9999` inclusive: `x="" ; echo '$x'`
- † a. `$x`
 - b. `*`
 - c. `'$x'`
 - d. the file names `1` through `9999`
 - e. the file names `1` through `9999`, surrounded by quotes
19. What is the `bash` shell output of this two-command sequence if run in a directory containing 9999 files with names that are all the numbers from `1` to `9999` inclusive: `x="" ; echo "$x"`
- † a. `*`
 - b. `$x`
 - c. `"$x"`
 - d. the file names `1` through `9999`
 - e. the file names `1` through `9999`, surrounded by quotes

20. What is the **bash** shell output of this two-command sequence if run in a directory containing 9999 files with names that are all the numbers from 1 to 9999 inclusive: `x="*" ; echo $x`
- † a. the file names 1 through 9999
 - b. all the file names that start with an asterisk ('*')
 - c. an asterisk ('*') and the file names 1 through 9999
 - d. *
 - e. \$x
21. Which of these statements is true?
- † a. If /a is an empty directory, `cat /a/*` produces an error message.
 - b. If /a is an empty directory, `echo /a/*` produces an error message.
 - c. Typing `./script` and just `script` always give identical results.
 - d. The `cat` command looks up a command line file name argument (i.e. `cat filename`) in your `$PATH`.
 - e. Shell glob (wildcard) patterns are expanded before shell variables are expanded.
22. What would you type to change the permissions on a file to `rw-r-xr--`?
- † a. `chmod 654 file`
 - b. `chmod 221 file`
 - c. `chmod 212 file`
 - d. `chmod 351 file`
 - e. `chmod 530 file`
23. Which **bash** command line below turns *on* the `noclobber` option?
- † a. `set -o noclobber`
 - b. `set +o noclobber`
 - c. `set +noclobber`
 - d. `set -noclobber`
 - e. `set noclobber=1`
24. Which **bash** command line below allows programs in the current directory to execute without preceding the names with `./`?
- † a. `PATH=/bin:$HOME:.`
 - b. `PATH = /bin:$HOME:.`
 - c. `PATH = ./ $HOME:/bin`
 - d. `$PATH=/bin:./ $HOME`
 - e. `$PATH=.: $HOME:/bin`
25. If file `foo` contains the line `x=123` then what is the **bash** output of this sequence of three commands:
- ```
x=abc ; source foo ; echo "I see '$x' here."
```
- † a. I see '123' here.
  - b. I see 'abc' here.
  - c. I see '\$x' here.
  - d. I see \$x here.
  - e. "I see abc here."

26. What is the **bash** output of this sequence of two commands:
- ```
x=';' ; echo one $x date
```
- † a. one ; date
 - b. one followed by `Mon Sep 30 08:00:00 EDT 2002` on a new line
 - c. one \$x date
 - d. one ';' date
 - e. one ; Mon Sep 30 08:00:00 EDT 2002
27. What is the **bash** output of this command sequence:
- ```
false && echo "Hello There"
```
- † a. no output
  - b. "Hello There"
  - c. Hello There
  - d. Hello There
  - e. HelloThere
28. A shell script named `foo` is executed as follows:
- ```
./foo a b "c d e"
```
- Inside the script is the line: `echo "$@"`
- How many arguments are passed to the `echo` command inside the script?
- † a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. 5
29. A shell script named `foo` is executed as follows:
- ```
./foo 1 "2 3 4" 5
```
- Inside the script is the line: `sort "$@"`
- How many arguments are passed to the `sort` command inside the script?
- † a. 3
  - b. 1
  - c. 2
  - d. 4
  - e. 5
30. A shell script named `foo` is executed as follows:
- ```
./foo 1 "2 3 4" 5
```
- Inside the script is the line: `echo "$2"`
- What is the output from this line?
- † a. 2 3 4
 - b. 2
 - c. "2
 - d. \$2
 - e. a bash error message: unbound (undefined) variable

31. What is the **bash** shell output of this command sequence:

```
true && echo Hello      There $?
```

- † a. Hello There 0
- b. Hello There ?
- c. Hello There ?
- d. Hello There 1
- e. no output

32. What is the **bash** shell output of this two-command sequence:

```
cd /home/alleni && echo "In $(pwd)"
```

- † a. In /home/alleni
- b. In 0pwd)
- c. In \$(pwd)
- d. "In \$(pwd)"
- e. no output

33. What is the **bash** shell output of this two-line command sequence:

```
foo () { echo "$1 and $2" ; }
foo "a b" 'c d' e f
```

- † a. a b and c d
- b. a and b
- c. \$1 and \$2
- d. "a b and c d"
- e. "a b" and 'c d'

34. Select the correct **bash** shell order of command line processing:

- † a. aliases, redirection, variables, globs
- b. aliases, variables, redirection, globs
- c. aliases, variables, globs, redirection
- d. aliases, globs, variables, redirection
- e. redirection, aliases, globs, variables

35. In an empty directory, what is the **bash** shell output of this three-command sequence:

```
touch aa .a ab .b ac .c ; x='*a *b' ; echo $x
```

- † a. aa ab
- b. aa ab ac b*
- c. \$x
- d. *a *b
- e. a* b*

36. In an empty directory, what is the **bash** shell output of this three-command sequence:

```
touch aa .a ab .b ac .c ; x='a* b*' ; echo "$x"
```

- † a. a* b*
- b. aa ab
- c. aa ab ac b*
- d. \$x
- e. *a *b

37. In an empty directory, what is the **bash** shell output of this three-command sequence:

```
touch aa .a ab .b .c ; x='.a* .b*' ; echo '$x'
```

- † a. \$x
- b. .a* .b*
- c. '.a* .b*'
- d. .a .b
- e. aa .a ab .b

38. In an empty directory, how many files will be created using the following **bash** shell two-command sequence:

```
x='12 3 4 5' ; touch $x
```

- † a. 4 files
- b. 1 file
- c. 2 files
- d. 3 files
- e. 5 files

39. In an empty directory, how many files will be created using the following **bash** shell two-command sequence:

```
x='1 2 3 45' ; touch "$x"
```

- † a. 1 file
- b. 2 files
- c. 3 files
- d. 4 files
- e. 5 files

40. In an empty directory, what is the length of the longest file name created by the following **bash** shell two-command sequence:

```
x='1 12 123 1234' ; touch '$x'
```

- † a. 2 characters
- b. 1 character
- c. 3 characters
- d. 4 characters
- e. 13 characters

**Answer Key - CST 8129 – Ian Allen – Fall 2002 - CST 8129 Test #1 -
Unix - 10%**

Office use only: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

- 1. a Count of letter a: 40 100%
- 2. a
- 3. a Questions with 5 choices: 40
- 4. a 1 2 3 4 5 6 7 8 9 10 11 12
- 5. a 13 14 15 16 17 18 19 20 21
- 6. a 22 23 24 25 26 27 28 29 30
- 7. a 31 32 33 34 35 36 37 38 39
- 8. a 40
- 9. a
- 10. a Macro .cmd splits: 21
- 11. a
- 12. a
- 13. a
- 14. a
- 15. a
- 16. a
- 17. a
- 18. a
- 19. a
- 20. a
- 21. a
- 22. a
- 23. a
- 24. a
- 25. a
- 26. a
- 27. a
- 28. a
- 29. a
- 30. a
- 31. a
- 32. a
- 33. a
- 34. a
- 35. a
- 36. a
- 37. a
- 38. a
- 39. a
- 40. a