45 minutes

Evaluation: 40 Questions

Name:

Important Instructions

- Manage your time when answering questions on this test. 1.
- 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 cat

which of the following key sequences will send an EOF and take you immediately back to the command prompt?

- † a. [CTRL-D]
 - b. [CTRL-C]
 - c. [CTRL-I]
 - d. [CTRL-U]
 - e. [CTRL-R]
- 3. Which command below removes *only* this five-character file name containing a special character (and no others): date?
 - † a. rm ./date\?
 - b. rm date/?
 - c. rm date\\?
 - d. rm date*
 - e. rm ./date?
- 4. Which command below removes *only* this five-character file name containing a special character (and no others): *test
- † a. rm "*test"
 - b. rm ./*test
 - c. rm *test
 - d. rm ''*test''
 - e. rm ./*test

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

echo " one '2 three' 4 "five 6 ' 7 "8 ' >out

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

drwxr-x--x 512 ian user 712 May 30 12:35 dir

- † a. The number 512 is the count of links (names) this directory has.
 - b. The number 512 is the inode number of this directory.
 - c. The number 512 is the size of this directory.
 - d. The number 712 is the count of links (names) this directory has.
 - e. The number 712 is the inode number of this directory.
- 9. Given an existing file of yours named **sort**, what is the output of this sequence of three shell commands:

echo hi >sort ; wc sort >sort ; cat sort

- † a. 0 0 0 sort
- b. 1 1 3 sort
- c. 1 1 2 sort
- d. 2 2 4 sort
- e. no output
- 10. Given an existing file of yours named wc, what is the output of this sequence of three shell commands: echo hi >wc ; sort wc >wc ; cat wc
- † a. no output
 - b. 0 0 0 wc
 - c. 1 1 3 wc.
 - d. 1 1 2 wc
 - e. 2 2 4 wc

11. How many arguments are passed to the command by the shell on this command line: <foo foo -foo >foo " foo >foo "foo

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- † a. 2
 - b. 3
 - c. **4**
 - d. 5
 - e. 6

12. Which of the following shell command lines displays only the names in the current directory that are exactly three digits (numeric) long?

- † a. echo [0-89][01-9][0-45-9]
 - b. echo [a-zA-Z][a-zA-Z][a-zA-Z]
 - c. echo [1-3][1-3][1-3]
 - d. echo [?][?][?]
 - e. echo ???

13. If directory /a contains only these seven two-character file names: ad, bd, cd, dd, a., a?, a*, then which shell command below will remove only the single name **ad** from the directory (and no others)?

- † a. rm /a/a[a-z]
 - b. rm /a/a\?
 - c. rm /a/a?
 - d. rm /a/a*
 - e. rm /a/[a-z]d

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 echo /a/b/??? line:

- † 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=/bin:/usr/bin; cat nosuchfile

- † a. cat: nosuchfile: No such file or directory
 - b. bash: cat: command not found
 - c. bash: /bin/cat: command not found
 - d. bash: /bin:/usr/bin: No such file or directory
 - e. cat: /bin:/usr/bin: No such file or directory

16. Which line below passes one *single* argument to the **sort** command when placed inside a shell script named **foo** invoked by the command line:

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```
./foo a b c
```

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- † a. sort "\$*"
 - b. sort "\$@"
 - c. sort \$*
 - d. sort \$@
 - e. sort "\$1" "\$2" "\$3"

17. Given the following bash shell command line: read a b c, which user keyboard input line below will assign the text **y** to the shell variable named **b**?

- † a. x y z
 - b. a b c
 - c. x=a y=b z=c
 - d. a,b,c
 - e. x,y,z

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 abc='* *'; echo '\$abc' 9999 inclusive:

- † a. Sabc
- b. * *
- c. 'Sabc'
- d. the file names 1 through 9999
- e. the file names 1 through 9999, repeated twice

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 var="*1" ; echo "\$var" **9999** inclusive:

- † a. *1
 - b. **Svar**
 - c. all the file names that end in the digit 1
 - d. the file names 1 through 9999 followed by a digit 1
 - e. all the file names that start with an asterisk ('*')

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: foo="1*"; echo \$foo

- † a. all the file names starting with the digit 1
 - b. all the file names that end with an asterisk ('*')
 - c. all the file names 1 through 9999
 - d. 1*
 - e. \$foo

- 21. Which of these statements is true?
 - † a. If /x is an empty directory, echo /x/* produces no error message.
 - b. If /y is an empty directory, cat /y/* produces no error message.
 - c. Typing ./foo and just foo always give identical results.
 - d. The **sort** command looks up a command line file name argument (i.e. sort filename) in your \$PATH.
 - e. Quotes inside the text from expanded variables are special to the shell
- 22. What would you type to change the permissions on a file to **--x-wx-w-**?
 - † a. chmod 132 file
 - b. chmod 121 file
 - c. chmod 322 file
 - d. chmod 122 file
 - e. chmod 654 file
- 23. Which bash command line below turns off 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:/usr/bin:.
 - b. PATH = /bin:.
 - c. PATH = ./usr/bin:/bin
 - d. SPATH=/bin:./usr/bin
 - e. \$PATH=./usr/bin
- 25. If file bar contains the line var=foo then what is the bash output of this sequence of three commands:

var=abc ; read bar ; echo "output '\$var' now"

- † a. output 'abc' now
- b. output 'foo' now
- c. output '\$var' now
- d. output \$var now
- e. output 'bar' now
- 26. What is the **bash** output of this sequence of two commands:

semi=";"; echo date \$semi echo hi

- † a. date ; echo hi
 - b. Mon Oct 21 08:00:00 2002; hi
 - c. Mon Oct 21 08:00:00 2002; echo hi
 - d. Mon Oct 21 08:00:00 2002 followed by hi on a new line
 - e. Mon Oct 21 08:00:00 2002 followed by echo hi on a new line

27. A shell script named **bar** is executed as follows:

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./bar "one two" "three four five"

Inside the script is the line: echo "\$@"

How many arguments are passed to the **echo** command inside the script?

- b. 1
- c. 3
- d. 4
- e. 5
- 28. A shell script named **srt** is executed as follows:

Inside the script is the line: head \$*

How many arguments are passed to the **head** command inside the script?

- † a. 4
- b. 5
- c. 3
- d. 1
- e. **2**
- 29. A shell script named **luk** is executed as follows:

Inside the script is the line: echo "\$2"

What is the output from this line?

- † a. c d
 - b. **b**
 - c. 'b'
 - d. 'c
 - e. **e f**
- 30. What is the **bash** output of this command sequence:

- † a. foo bar 1
 - h. foo bar 0
 - c. foo bar 1
 - d. foo bar 0
 - e. no output
- 31. What is the **bash** shell output of this command sequence:

true && echo "one two \$?"

- † a. one two 0
 - b. one two 1
 - c. one two 0
 - d. one two 1
 - e. no output

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

```
cd /bin || echo "$(pwd) string"
```

- † a. no output
 - b. /bin string
 - c. **Opwd**) string
 - d. \$(pwd) string
 - e. bash: cd /bin: No such file or directory

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

```
cd /usr/bin && echo "the '$(pwd)' string"
```

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- † a. the '/usr/bin' string
 - b. the '\$(pwd)' string
 - c. the \$(pwd) string
 - d. the 'Opwd)' string
 - e. no output

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

```
foo () { echo "a '$1' and '$2' str" ; }
foo "1 2" '3' '4' '5 6'
```

- † a. a '1 2' and '3' str
 - b. a '\$1' and '\$2' str
 - c. a \$1 and \$2 str
 - d. a '1' and '2' str
 - e. a 1 2 and 3 4 str

35. In an empty directory, what is the **bash** shell output of this three-command sequence: touch .aa .ab .ac .ad ; x='???' ; echo '\$x'

- † a. \$x
 - h. ???
 - c. .aa .ab .ac .ad
 - d. ??? ??? ???
 - e. no output

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

```
touch .1 10 .2 21 2 33 ; x='1? 2*' ; echo "$x"
```

- † a. 1? 2*
 - b. Sx
 - c. 10 21 2
 - d. .1 10 .2 21 2
 - e. ?1 *2

```
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```

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

```
touch .1 10 11 .2 a1 22 a2; x='?1 *2'; echo $x
† a. 11 a1 22 a2
```

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- b. .1 11 a1 .2 22 a2
- c. **\$x**
- d. ?1 *2
- e. 1? 2*
- 38. In an empty directory, how many files will be created using the following **bash** shell two-command sequence:

- † **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:

- † 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:

- † a. 8 characters
 - b. 9 characters
 - c. 2 characters
 - d. 3 characters
 - e. 4 characters

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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

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 22 23 24 25 26 27 28 29 30 6. a

31 32 33 34 35 36 37 38 39 7. a 8. a 40

9. a

Macro .cmd splits: 19 10. a

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