Evaluation: 54 Questions **Name: _____**

Important Instructions

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

Multiple Choice - 54 Questions

This is a practice test containing many practice questions. The real test will contain some questions similar to these. The real test will have approximately one question per minute.

The real test may have some questions unlike anything given here. Knowing the concepts behind the questions is necessary; memorizing these specific answers won't help.

(Office use only: 29 54 28 27 33 7 25 22 20 8 43 45 41 44 6 39 35 12 11 17 48 31 26 4 2 13 3 50 52 15 10 34 49 1 18 9 46 42 5 36 37 32 23 19 53 24 14 47 21 38 51 30 40 16)

1. What is the output of this sequence of three shell commands:

```
umask 457 ; mkdir newdir ; ls -ld newdir
```

a. `d-wx-w---- 2 me me 512 Oct 1 1:12 newdir`
b. `d-wx-w-rwx 2 me me 512 Oct 1 1:12 newdir`
c. `d-w--w---- 2 me me 512 Oct 1 1:12 newdir`
d. `dr-xr-xrwx 2 me me 512 Oct 1 1:12 newdir`
e. `dr--r-xrwx 2 me me 512 Oct 1 1:12 newdir`

2. What minimal permissions must you have on a directory to be able to execute successfully the command **`ls .`** from *inside* the directory?

a. **`r-x`**
b. **`rw-`**
c. **`--x`**
d. **`-wx`**
e. **`r--`**

3. What is the output of this sequence of three shell commands:

```
umask 547 ; mkdir newdir ; ls -ld newdir
```

a. `d-w--wx--- 1 me me 0 Feb 20 07:55 newdir`
b. `dr--r--rw- 1 me me 0 Feb 20 07:55 newdir`
c. `d-w--w---- 1 me me 0 Feb 20 07:55 newdir`
d. `dr-xr--rwx 1 me me 0 Feb 20 07:55 newdir`
e. `d-w--wxrwx 1 me me 0 Feb 20 07:55 newdir`

4. How many arguments and options are there to the command:

```
wc <infile -l
```

a. A file name starting with a dash and an **`<infile`** switch option argument.
b. One command line argument containing one option name.
c. Two arguments, one of which is a single option name and the other is a pathname.
d. Three arguments, one of which contains an option and one is a pathname.
e. Two arguments, neither of which is an option.

5. How many arguments are passed to the command by the shell on this command line:

```
<bat bat -b "-a -r" >bat bat bat
```

a. **`7`**
b. **`4`**
c. **`6`**
d. **`5`**
e. **`3`**

6. Which of the following shell command lines displays all the names in the current directory that are exactly three letters (alphabetic) long (and nothing else)?

a. **`echo [a-mn-zA-YZ][ab-zAB-YZ][za-yZA-Y]`**
b. **`echo [0-89][01-9][0-45-9]`**
c. **`echo [a,zA,Z][a,zA,Z][a,zA,Z]`**
d. **`echo ???`**
e. **`echo [azAZ][azAZ][azAZ]`**

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

```
PATH=/bin/ls:/bin/head:/bin/sh ; head nosuchfile
```

a. **`ls: /bin/head: command not found`**
b. **`bash: /bin/ls: command not found`**
c. **`head: nosuchfile: No such file or directory`**
d. **`bash: /bin/sh: No such file or directory`**
e. **`bash: head: command not found`**

8. If **`/bin/foo`** is a program that outputs **`dad`** and **`/usr/bin/foo`** is a program that outputs **`mom`** what is the output of this shell command sequence:

```
PATH=/usr:/etc:/bin:/usr/bin ; foo
```

a. **`mom`**
b. **`dad`**
c. **`dad`** followed by **`mom`**
d. **`mom`** followed by **`dad`**
e. **`bash: foo: command not found`**

9. If **`/bin/pig`** is a program that outputs **`hi`** and **`/usr/bin/pig`** is a program that outputs **`foo`** what is the output of this shell command sequence:

```
PATH=/etc:/usr/bin:/bin ; pig
```

a. **`bash: pig: command not found`**
b. **`foo`** followed by **`hi`**
c. **`hi`**
d. **`hi`** followed by **`foo`**
e. **`foo`**

10. Which of the following shell command lines displays all the names in the current directory that are exactly three letters (alphabetic) long (and nothing else)?

a. **`echo [a-zA-Za-zA-Za-zA-Z]`**
b. **`echo [a,zA,Z][a,zA,Z][a,zA,Z]`**
c. **`echo ???`**
d. **`echo [azAZ][azAZ][azAZ]`**
e. **`echo [a-zA-Z][a-zA-Z][a-zA-Z]`**

11. If **cat** is an executable script containing the line:
    TERM=linux ; export TERM
    what is the output of the following sequence of commands:
    TERM=vt100 ; ./cat ; echo "$TERM"
    a. **$TERM**
    b. **linux**
    c. **cat**
    d. **TERM**
    e. **vt100**

12. In an empty directory, how many lines are in file **out** after this bash shell command line: **ls . .. nosuchfile 2>out**
    a. **1**
    b. **2**
    c. **4**
    d. no output (empty file)
    e. **3**

13. If **foo** is an executable script containing the line:
    PATH=/bin ; export PATH
    what is the output of the following sequence of commands:
    PATH=/etc ; ./foo ; echo "$PATH"
    a. **/etc**
    b. **foo**
    c. **$PATH**
    d. **/etc:/bin**
    e. **/bin**

14. If **dog** is an executable script containing the line: **umask 0777**
    what is the output of the following sequence of commands:
    umask 0022 ; ./dog ; umask
    a. **0777**
    b. **0022**
    c. nothing; no output
    d. **0755**
    e. **0799**

15. Which **bash** command line below allows programs in the current directory to execute without preceding the names with **./**?
    a. **$PATH=./bin:./$HOME**
    b. **PATH=./$HOME:./bin**
    c. **PATH=.:/bin:$HOME**
    d. **$PATH=$HOME:.:/usr/bin**
    e. **PATH=/bin/.:$HOME/.**

16. In an empty directory, what appears on your screen after this **bash** command line?
    ls 2>/dev/null nosuchfile
    a. **ls: 2>/dev/null nosuchfile: No such file or directory**
    b. **ls: nosuchfile: No such file or directory**
    c. **ls: /dev/null: No such file or directory**
    d. no output
    e. **nosuchfile**

17. How many arguments are passed to the command by the shell on this command line:
    <cow cow "-x "-y '-z' >cow cow
    a. **7**
    b. **5**
    c. **6**
    d. **3**
    e. **4**

18. Which of these statements is true?
    a. If **/p** is an empty directory, **ls /p/.*** produces an error message.
    b. The **ls dir** command looks up the directory argument **dir** in your **$PATH**.
    c. If **/q** is an empty directory, **echo /q/.*** produces an error message.
    d. Typing **./script** and **bash script** always give identical results.
    e. Either single or double quotes will stop shell glob (wildcard) patterns from expanding.

19. Which of these statements is true?
    a. Only single quotes are strong enough to stop shell glob (wildcard) patterns from expanding.
    b. If **/x** is an empty directory, **sort /x/*** produces an error message.
    c. The **cat food** command looks up the file name argument **food** in your **$PATH**.
    d. Typing **./script** and **bash script** always give identical results.
    e. If **/y** is an empty directory, **echo /y/*** produces an error message.

20. If the file **pig** contained the word **foo**, what would be the **bash** shell output of this two command sequence:
    PATH=/etc/passwd:/bin/ls:/bin/cat ; /bin/ls pig
    a. **foo**
    b. no output
    c. **/bin/ls: pig: No such file or directory**
    d. **bash: /bin/ls: command not found**
    e. **pig**

21. Which of these commands makes a file owned by me, also executable by me?
    a. **umask 777 myfile**
    b. **chmod x+u myfile**
    c. **chmod u+x ./myfile**
    d. **chmod x=u ./myfile**
    e. **umask 111 myfile**

22. What is the output of this sequence of three shell commands:
```
umask 762 ; touch newfile ; ls -l newfile
```
a. `-------r-- 1 me me 0 Oct 1 1:12 newfile`
b. `-rwxrw--w- 1 me me 0 Oct 1 1:12 newfile`
c. `------xr-x 1 me me 0 Oct 1 1:12 newfile`
d. `-rw-rw--w- 1 me me 0 Oct 1 1:12 newfile`
e. `--------wx 1 me me 0 Oct 1 1:12 newfile`

23. How many arguments and options are there to the command:
```
sort -r <infile
```
a. Three arguments, one of which contains an option and one is a pathname.
b. Two arguments, neither of which is an option.
c. One command line argument containing one option name.
d. Two arguments, one of which is a single option name and the other is a pathname.
e. A file name starting with a dash and an **`<infile`** switch option argument.

24. Which **`bash`** command line below allows programs in the current directory to execute without preceding the names with **`./`**?
a. `PATH=/bin:$HOME:.`
b. `PATH = ./$HOME:/bin`
c. `PATH = /bin:$HOME:.`
d. `$PATH=.:$HOME:/bin`
e. `$PATH=/bin:./$HOME`

25. What is the correct syntax to redirect both standard output and standard error into the same output file?
a. `wc 2>&1 >out foo`
b. `wc 2>1 >out foo`
c. `wc >out 2>1 foo`
d. `wc >out 2>out foo`
e. `wc >out 2>&1 foo`

26. 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. Permissions **`100`** on directory **`dir`** and **`200`** on file **`dir/foo`**.
b. Permissions **`100`** on directory **`dir`** and **`100`** on file **`dir/foo`**.
c. Permissions **`300`** on directory **`dir`** and **`300`** on file **`dir/foo`**.
d. Permissions **`300`** on directory **`dir`** and **`500`** on file **`dir/foo`**.
e. Permissions **`500`** on directory **`dir`** and **`400`** on file **`dir/foo`**.

27. What is the correct syntax to redirect both standard output and standard error into the same output file?
a. `ls -l >foo 2>$1`
b. `ls -l 2>$1 >foo`
c. `ls -l 2>&1 >foo`
d. `ls -l >foo 2>&1`
e. `ls -l >foo 2>foo`

28. Which of the following VI/VIM key sequences will move the entire line on which the cursor resides to after the line that follows it (i.e. it would move line 5 to be line 6 and line 6 would become line 5)?
a. `DDp`
b. `ddP`
c. `:dp`
d. `DDP`
e. `ddp`

29. Which line below is most likely to be the beginning of an error message?
a. `echo 1>&2 "... "`
b. `echo 2>$1 "... "`
c. `echo 1<&2 "... "`
d. `echo 2<$1 "... "`
e. `echo 2>&1 "... "`

30. Given my directory **`dir`** and my file **`dir/foo`** owned by me, which permissions allow me to access and change the content (data) in the file **`dir/foo`** but not delete the file?
a. Permissions **`100`** on directory **`dir`** and **`100`** on file **`dir/foo`**.
b. Permissions **`500`** on directory **`dir`** and **`600`** on file **`dir/foo`**.
c. Permissions **`600`** on directory **`dir`** and **`700`** on file **`dir/foo`**.
d. Permissions **`300`** on directory **`dir`** and **`200`** on file **`dir/foo`**.
e. Permissions **`400`** on directory **`dir`** and **`400`** on file **`dir/foo`**.

31. Which of the following shell command lines displays only the names in the current directory that are exactly three alphabetic letters long?
a. `echo ***`
b. `echo [?][?][?]`
c. `echo [a-zA-Z][a-zA-Z][a-zA-Z]`
d. `echo [0-3][0-3][0-3]`
e. `echo ???`

32. How many arguments are passed to the command by the shell on this command line:
```
<pig pig -x " " -z -r" " >pig pig pig
```
a. **`6`**
b. **`8`**
c. **`7`**
d. **`9`**
e. **`5`**

33. Which of these first lines will cause this executable file to be interpreted using the Bash shell?
a. `#/bin/bash`
b. `!#/bin/bash -u`
c. `!/bin/bash`
d. `#!/bin/bash`
e. `/bin/bash -u`

34. What is the correct syntax to redirect both standard output and standard error into the same output file?
    a. **command 2>1 >out**
    b. **command >out 2>1**
    c. **command 2>&1 >out**
    d. **command >out 2>&1**
    e. **command 2>out >out**

35. If the file **bat** contained the word **foo**, what would be the **bash** shell output of this two command sequence:
    PATH=/bin/ls:/bin/who:/etc/passwd ; /bin/ls bat
    a. **bash: /bin/ls: command not found**
    b. **bat**
    c. **/bin/ls: bat: No such file or directory**
    d. **foo**
    e. no output

36. Which of the following shell command lines displays the names in the current directory that are exactly three numeric digits long (and nothing else)?
    a. **echo ???**
    b. **echo [1-3][1-3][1-3]**
    c. **echo [1-31-31-3]**
    d. **echo [0-9][0-9][0-9]**
    e. **echo [0-90-90-9]**

37. If your PATH variable contains **/bin:/usr/bin**, what is the output of this **bash** shell command line? **echo '$PATH'**
    a. **'/bin:/usr/bin'**
    b. **/bin:/usr/bin**
    c. **$PATH**
    d. **echo: $PATH: No such file or directory**
    e. **'$PATH'**

38. If **bar** is an executable script containing the line:
    TERM=vt100 ; export TERM
    what is the output of the following sequence of commands:
    TERM=linux ; ./bar ; echo "$TERM"
    a. **vt100**
    b. **./bar**
    c. **TERM**
    d. **$TERM**
    e. **linux**

39. Which **bash** command line below allows programs in the current directory to execute without preceding the names with **./**?
    a. **PATH=./$HOME:/usr/bin**
    b. **$PATH=/usr/bin:./$HOME**
    c. **PATH=/usr/bin:.:$HOME**
    d. **$PATH=$HOME:/usr/bin:.**
    e. **PATH=/usr/bin/.:$HOME**

40. If **foo** were a file of text containing 50 different lines, what would be the output of this exact command line: **diff foo foo**
    a. no output
    b. several lines, which are the lines that are different between the two files
    c. an error message because **diff** only allows one file name
    d. the contents of file **foo** would be displayed
    e. an error message because **diff** doesn't allow the same file name twice

41. If **happy** were a file of text containing 50 different lines, what would be the output of this exact command line: **cp happy sad ; diff happy sad**
    a. several lines, which are the lines that are different between the two files
    b. no output
    c. an error message because **diff** doesn't allow different file names
    d. the contents of file **happy** would be displayed
    e. an error message because **diff** only allows one file name

42. How many arguments are passed to the command by the shell on this command line:
    <bar bar -b "-a" '-r' >bar bar bar
    a. **4**
    b. **7**
    c. **5**
    d. **6**
    e. **3**

43. If **/bin/foo** is a program that outputs **mom** and **/usr/bin/foo** is a program that outputs **dad** what is the output of this shell command sequence:
    PATH=/bin/foo:/usr/bin/foo:/usr ; foo
    a. **mom** followed by **dad**
    b. **dad** followed by **mom**
    c. **bash: foo: command not found**
    d. **mom**
    e. **dad**

44. If the file **foo** contained the word **mom**, what would be the **bash** shell output of this two command sequence:
    PATH=/bin/ps:/bin/echo:/bin/ls ; /bin/ls foo
    a. **mom**
    b. no output
    c. **bash: /bin/ls: command not found**
    d. **/bin/ls: foo: No such file or directory**
    e. **foo**

45. Which command stops people from using **write** to put lines of text on your screen?
    a. **umask 000**
    b. **chmod 000**
    c. **stop 0**
    d. **mesg n**
    e. **write n**

46. What is the **bash** shell output of this two command sequence:
```
PATH=/bin/ls:/bin/cat:/bin/sh ; cat nosuchfile
```
a. **cat: nosuchfile: No such file or directory**
b. **bash: /bin/sh: No such file or directory**
c. **ls: /bin/cat: command not found**
d. **bash: /bin/ls: command not found**
e. **bash: cat: command not found**

47. Given my directory **dir** and my file **dir/bar** owned by me, which permissions allow me to delete the file **dir/bar** from the directory, but not change the content (data) in the file?
a. Permissions **500** on directory **dir** and **500** on file **dir/bar**.
b. Permissions **100** on directory **dir** and **300** on file **dir/bar**.
c. Permissions **300** on directory **dir** and **200** on file **dir/bar**.
d. Permissions **300** on directory **dir** and **400** on file **dir/bar**.
e. Permissions **100** on directory **dir** and **500** on file **dir/bar**.

48. Which of the following **PATH** statements makes the most sense?
a. **PATH=/bin:/bin/cat:/usr/bin**
b. **PATH=/bin:/usr/bin:/etc/passwd**
c. **PATH=/usr:/bin:/usr/bin:/etc**
d. **PATH=/bin/sh:/usr/bin:/etc:/bin**
e. **PATH=/bin/ls:/etc:/usr/bin**

49. If **/bin/bat** is a program that outputs **foo** and **/usr/bin/bat** is a program that outputs **hi** what is the output of this shell command sequence:
```
PATH=/usr:/usr/bin:/bin ; bat
```
a. **hi** followed by **foo**
b. **foo**
c. **hi**
d. **bash: bat: command not found**
e. **foo** followed by **hi**

50. In an empty directory, what appears on your screen after this **bash** command line?
```
ls out 2>/dev/null
```
a. **ls: /dev/null: No such file or directory**
b. **ls: out 2>/dev/null: No such file or directory**
c. no output
d. **ls: out: No such file or directory**
e. **out**

51. Which command sequence below does *not* generate an error message from the last command in the sequence?
a. **mkdir one one/two ; rmdir one/two**
b. **cat /etc/passwd > mail idallen@ncf.ca**
c. **mkdir foo ; sleep foo**
d. **mkdir foo foo/bar ; rmdir foo**
e. **date >foo ; cp foo/. bar**

52. What is the output of this sequence of three shell commands:
```
umask 674 ; touch newfile ; ls -l newfile
```
a. **---x----wx 1 me me 0 Feb 20 07:55 newfile**
b. **-rw-rwxr-- 1 me me 0 Feb 20 07:55 newfile**
c. **-rw-rw-r-- 1 me me 0 Feb 20 07:55 newfile**
d. **--w--wxr-x 1 me me 0 Feb 20 07:55 newfile**
e. **--------w- 1 me me 0 Feb 20 07:55 newfile**

53. In an empty directory, what appears on your screen after this **bash** command line?
```
ls 1>/dev/null nosuchfile
```
a. **nosuchfile**
b. **ls: nosuchfile: No such file or directory**
c. **ls: /dev/null: No such file or directory**
d. no output
e.
```
ls: 1>/dev/null nosuchfile: No such file or
directory
```

54. Given my directory **dir** and my file **dir/bar** owned by me, which permissions allow me to access and change the content (data) in the file **dir/bar** but not delete the file?
a. Permissions **700** on directory **dir** and **300** on file **dir/bar**.
b. Permissions **500** on directory **dir** and **500** on file **dir/bar**.
c. Permissions **300** on directory **dir** and **500** on file **dir/bar**.
d. Permissions **600** on directory **dir** and **200** on file **dir/bar**.
e. Permissions **100** on directory **dir** and **200** on file **dir/bar**.

Answer Key - DAT 2330 – Ian Allen – Fall 2004 - DAT 2330 Practice Test - 0%

Office use only: 29 54 28 27 33 7 25 22 20 8 43 45 41 44 6 39 35 12 11 17 48 31 26 4 2 13 3 50 52 15 10 34 49 1 18 9 46 42 5 36 37 32 23 19 53 24 14 47 21 38 51 30 40 16

1. a
2. a
3. a
4. b
5. b
6. a
7. e
8. b
9. e
10. e
11. e
12. a
13. a
14. b
15. c
16. d
17. d
18. e
19. b
20. e
21. c
22. a
23. c
24. a
25. e
26. d
27. d
28. e
29. a
30. b
31. c
32. a
33. d
34. d
35. b
36. d
37. c
38. e
39. c
40. a
41. b
42. c
43. c
44. e
45. d
46. e
47. d
48. c
49. c
50. c
51. a
52. e
53. b
54. e

Count of a: 12 22%
Count of b: 9 17%
Count of c: 11 20%
Count of d: 9 17%
Count of e: 13 24%

With 5 choices: 54
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 41 42 43 44 45 46 47 48
49 50 51 52 53 54

Macro .cmd splits: 31
Macro .ans splits: 0