Evaluation: 60 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 - 60 Questions

This is a practice test containing many practice questions. The real test will contain some questions similar to these. There are probably many more questions in this practice test than there will be time for in the real test. 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.

The answers to this test are in the Answer Key on the last page(s).

1. In an empty directory, how many arguments are passed to the **rm** command in this **bash** command line? **touch a a1 a2 ba ca ; rm a***
   a. **4**
   b. **3**
   c. **2**
   d. none
   e. **1**

2. 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/***
   c. **rm "/a/a*"**
   d. **rm /a***
   e. **rm /a/a?**

3. If file **/a/b** contains ninety-nine lines, each of which is the two-digit line number of the line in the file (**01** through **99**), what is the output of this command:
   sort /a/b /a/b | tail -4 | head -1
   a. **01 01**
   b. **98**
   c. **04 04**
   d. **96 96**
   e. **96**

4. If I am in my home directory named **/home/me** and **x** is an empty sub-directory, what is true after this command line:
   touch ./x/fil ; mv x/./fil x/../../me/./y
   a. the directory **x** now contains only a file named **y**
   b. the command fails because the path **x/../../me** does not exist
   c. the directory **x** is still empty
   d. the command fails because the path **x/./fil** does not exist
   e. there is a second copy of the file **fil** in the file named **y**

5. What is the output of this shell command line in an empty directory?
   touch .a .b .c ; echo .??*
   a. an error message from **echo** saying **.??*** does not exist
   b. **. .. .a .b .c**
   c. no output
   d. **.??***
   e. **.a .b .c**

6. If I am in my home directory named **/home/ian** and **mt** is an empty sub-directory, what is true after this command line:
   touch ../ian/cat ; cp ./mt/../cat ./mt/../dog
   a. the directory **mt** is still empty
   b. the directory **mt** now has a file named **dog** in it
   c. the directory **mt** now contains two files
   d. there is a second copy of the file named **who** in the file **dog**
   e. the command fails because the path **./mt/../cat** does not exist

7. Which of these statements is true?
   a. If **/x** is an empty directory, **sort /x/*** produces an error message.
   b. Only double quotes are strong enough to stop shell glob (wildcard) patterns from expanding.
   c. If **/y** is an empty directory, **echo /y/*** produces an error message.
   d. Only single quotes are strong enough to stop shell glob (wildcard) patterns from expanding.
   e. Only backslashes are strong enough to stop shell glob (wildcard) patterns from expanding.

8. 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. **DDp**
   d. **ddP**
   e. **:dp**

9. Which command pipeline outputs the count of the number of pathnames (including all subdirectories) that lie under the /etc directory?
   a. **man /etc ; wc**
   b. **ls /etc | wc**
   c. **ls /etc ; wc**
   d. **dir /etc | count**
   e. **find /etc | wc**

10. If I am in my home directory named **/home/myhome** and **sub** is an empty subdirectory, what is true after this command line:
    touch ./fil ; mv sub/../fil ../myhome/cat
    a. the command fails because the path **../myhome/cat** does not exist
    b. the directory **sub** now contains only a file named **cat**
    c. the directory **sub/..** now has a file named **cat** in it
    d. there is a second copy of the file **fil** in the file named **cat**
    e. the command fails because the path **sub/../fil** does not exist

11. When doing an **ls -a**, the output pathname that is a double dot (**..**) signifies what?
    a. A file or directory with double links.
    b. The parent directory.
    c. The root directory.
    d. A hidden file.
    e. The current directory.

12. If file **foo** contains nine 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:
    cat foo foo | sort -r | head -5 | tail -1
    a. **9**
    b. **8**
    c. **6**
    d. **7**
    e. **5**

13. What would you see if you typed this command: **cat /users**
    a. The contents of your subdirectory named **users**
    b. The contents of the file **users** located in your home directory
    c. The contents of the file **users** located in the parent directory
    d. The contents of the file **users** located in the root directory
    e. The contents of your directory named **users**

14. How can you ask the **bash** (Linux) shell to complete commands or file names for you?
    a. You can type the first part of the command or file name and press the **TAB** key.
    b. Type **[CONTROL]-[D]** and the shell will present a menu of commands.
    c. You can type the first part of the command or file name and press the **ALT** key.
    d. Type **[ALT]-[F2]** the shell will present a menu of commands.
    e. Type **[CONTROL]-[ALT]-[DEL]** and the shell will present a menu of commands.

15. Which Unix command sequence deletes a directory and everything inside it?
    a. **erase dir**
    b. **erase -r dir**
    c. **rm -r dir**
    d. **deltree -all dir**
    e. **rmdir -all dir**

16. What is the output of this shell command line in an empty directory?
    touch a .a bc .bc def ; echo [ab]*
    a. **[ab]***
    b. an error message from **echo** saying **[ab]*** does not exist
    c. **a bc**
    d. no output
    e. **a .a bc .bc**

17. What is the output of this shell command line in an empty directory? **echo ***
    a. no output
    b. *****
    c. **..**
    d. **.**
    e. **. ..**

18. What is the output of this successful command sequence?
    cd /home/foo ; touch dir ; mkdir bar ; pwd
    a. **/home/foo/dir**
    b. **/home/foo/bar**
    c. **/home/foo**
    d. **/bar**
    e. **/home/foo/dir/bar**

19. What command shows all the lines in file **/etc/group** that contain the string **idallen**?
    a. **grep /etc/group idallen**
    b. **grep idallen ; /etc/group**
    c. **cat /etc/group ; grep idallen**
    d. **cat /etc/group | wc idallen**
    e. **grep idallen /etc/group**

20. Which command line sorts the list of users currently logged in to the machine and displays just the one line containing the userid that sorts first?
    a. **sort who | head -1**
    b. **sort | who | head -1**
    c. **head -1 who | sort**
    d. **who | sort | head -1**
    e. **head -1 sort who**

21. Which of the following shell command lines displays all the names in the current directory that are exactly three digits long (and no others)?
    a. **`echo ???`**
    b. **`echo [3][3][3]`**
    c. **`echo [?][?][?]`**
    d. **`echo [0-9][0-9][0-9]`**
    e. **`echo [1-3][1-3][1-3]`**

22. How many lines are output on your screen after this command:
    `touch foo ; diff foo foo`
    a. 3
    b. 1
    c. 2
    d. 0
    e. 4

23. If my current directory is **`/etc`**, which of these pathnames is equivalent to the file name **`/etc/passwd`**?
    a. **`./etc/passwd`**
    b. **`./passwd`**
    c. **`../passwd`**
    d. **`../etc/passwd/.`**
    e. **`/passwd`**

24. Which of these statements is true?
    a. Unix commands can be entered in upper-case or lower-case letters; they are equivalent.
    b. You can only login to Unix once per userid; you cannot be logged in to the same machine twice.
    c. Unix commands must be entered in lower-case letters.
    d. To erase an entire line of typing, type [CONTROL]-[E].
    e. To indicate End-of-File (no more input), type [CONTROL]-[E].

25. In the output of the command **`ls -a`**, the one-character name **`.`** signifies what?
    a. A current file.
    b. A name that is hidden.
    c. The current directory.
    d. A name with an unprintable character.
    e. The parent directory.

26. If I am in my home directory named **`/home/alleni`** and **`empty`** is an empty sub-directory, what is true after this command line:
    `touch ./cat ; mv empty/../cat ../alleni/dog`
    a. the command fails because the path **`../alleni/dog`** does not exist
    b. the command fails because the path **`empty/../cat`** does not exist
    c. the directory **`empty`** now contains only a file named **`dog`**
    d. the directory **`empty/..`** now has a file named **`dog`** in it
    e. there is a second copy of the file **`cat`** in the file named **`dog`**

27. Which command line below does not show any lines from inside the file **`dog`**?
    a. **`ls dog`**
    b. **`less dog`**
    c. **`tail dog`**
    d. **`more dog`**
    e. **`head dog`**

28. What appears on your screen after this bash shell command line?
    `echo hi | wc`
    a. **`1 2 1`**
    b. no output
    c. **`1 1 2`**
    d. **`1 1 3`**
    e. **`2 1 1`**

29. 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 command fails because the name **`double`** does not exist
    c. there is a second copy of the file **`single`** in the file named **`double`**
    d. the command fails because the name **`foo/../double`** does not exist
    e. the directory **`foo`** now contains only a file named **`double`**

30. Which command line lists all possible utilities available for compiling programs?
    a. **`grep /etc/* compile`**
    b. **`apropos compile`**
    c. **`grep compile /etc/*`**
    d. **`man * | grep compile`**
    e. **`man compile`**

31. What is the output of this shell command line in an empty directory?
    `touch .12 .345 .6789 ; echo .??*`
    a. no output
    b. **`.??*`**
    c. **`.12 .345 .6789`**
    d. an error message from **`echo`** saying **`.??*`** does not exist
    e. **`. .. .12 .345 .6789`**

32. Which command line displays the contents of the Unix **`passwd`** file one page at a time?
    a. **`cat less | /etc/passwd`**
    b. **`/etc/passwd cat less`**
    c. **`less /etc/passwd`**
    d. **`/etc/passwd | less`**
    e. **`cat /etc/passwd less`**

33. In an empty directory, how many arguments are passed to the **cat** command in this **bash** command line? **touch a1 a2 ba ca ; cat a***
    a. **3**
    b. none
    c. **1**
    d. **2**
    e. **4**

34. If **cow** is a sub-directory that contains only the file **dog**, what happens after this command: **mv cow/dog cow/././cat**
    a. the command fails because the name **cat** does not exist
    b. the directory **cow** now contains only a file named **cat**
    c. there is a second copy of the file **dog** in the file named **cat**
    d. the directory **cow** is now empty
    e. the command fails because the name **cow/././cat** does not exist

35. If **/etc/passwd** is a file name, which of the following pathnames always leads to the same file?
    a. **././etc/passwd**
    b. **/./../etc/./passwd**
    c. **/etc/../../passwd**
    d. **/etc/passwd/../..**
    e. **/etc/passwd/./.**

36. If my current working directory is **/home**, and my home directory is **/home/me**, which of the of the following commands copies the Unix password file into my home directory under the name **foo**?
    a. **cp ../home/me/../etc/passwd ./me/./foo**
    b. **cp me/../../etc/passwd me/foo**
    c. **cp ./me/../etc/passwd ../home/me/foo**
    d. **cp ../../etc/passwd /me/foo**
    e. **cp ../etc/passwd ../me/foo**

37. Which command sequence below outputs only lines 10-15 of the 16-line file named **hex**?
    a. **tail -16 hex | head -10**
    b. **head -16 hex | tail -5 hex**
    c. **head -15 hex | tail -6**
    d. **head -10 hex | tail -15 hex**
    e. **tail -10 hex | head -16 hex**

38. If file **foo** contains nine lines, each of which is the number of the line in the file, what is the output of this command:
    cat foo foo | sort | tail -4 | head -1
    a. **1**
    b. no output
    c. **4**
    d. **8**
    e. **6**

39. If directory **foo** contains only these four three-character file names: **.x1**, **.x2**, **.z3**, **.z.**, then what is the output of the following **bash** shell command line:
    echo foo/???
    a. no output
    b. **foo/.z.**
    c. **foo/.x1 foo/.x2 foo/.z3**
    d. **foo/.x1 foo/.x2 foo/.z3 foo/.z.**
    e. **foo/???**

40. What is the output of this shell command line in an empty directory? **ls ***
    a. **.**
    b. **. ..**
    c. *****
    d. no output
    e. an error message from **ls** saying ***** does not exist

41. If my current directory is **/bin**, which of these pathnames is equivalent to the file name **/bin/ls**?
    a. **/root/bin/ls**
    b. **./bin/ls**
    c. **../../bin/ls**
    d. **ls/.**
    e. **../bin/ls/.**

42. 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 [a-zA-Z][a-zA-Z][a-zA-Z]**
    c. **echo ???**
    d. **echo [0-3][0-3][0-3]**
    e. **echo [?][?][?]**

43. If my current directory is **/home**, which of these pathnames is equivalent to the pathname **/home/a/b/c**?
    a. **/a/b/c**
    b. **../home/b/c**
    c. **./home/a/b/c**
    d. **../a/b/c**
    e. **./a/b/c**

44. Which command below is the best way to find a line containing a question mark (**?**) in the file **/etc/passwd**?
    a. **grep '?' /etc/passwd**
    b. **grep /etc/passwd ./?**
    c. **grep ? ; /etc/passwd**
    d. **grep ? /etc/passwd**
    e. **grep ./? /etc/passwd**

45. Which of the following is true, given this long directory listing from **ls**:
```
drwxr-x--x 256 ian user 512 May 30 12:35 dir
```
a. The number 256 is the octal permissions of this directory.
b. The number 512 is the count of links (names) this directory has.
c. The number 256 is the inode number of this directory.
d. The number 256 is the size of this directory.
e. The number 512 is the size of this directory.

46. Which of the following pathnames always leads to the same file named: **/etc/passwd**?
a. **/etc/passwd/.**
b. **../etc/passwd**
c. **./etc/passwd**
d. **/etc/./etc/../passwd**
e. **/etc/../etc/passwd**

47. What is the output of this shell command line in an empty directory?
```
touch .a .b .c ; echo [.]*
```
a. **[.]***
b. **. .. .a .b .c**
c. **.a .b .c**
d. an error message from **echo** saying **[.]*** does not exist
e. no output

48. 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-L]**
c. **[CTRL-U]**
d. **[CTRL-R]**
e. **[CTRL-D]**

49. Which of these statements is true?
a. The **file** command creates a new, empty file in the current directory
b. To interrupt a Unix process from the keyboard, type **[CONTROL]-[D]**.
c. Command **apropos** is an exact synonym for command **man**.
d. To indicate End-of-File (no more input) to a program, type **[CONTROL]-[D]**.
e. To erase an entire line of typing, type **[ALT]-[DELETE]**.

50. What command can you use to remove a directory that isn't empty?
a. **rmdir -r dir**
b. **rm -r dir**
c. **deldir -r dir**
d. **mv -r dir**
e. **del -r dir**

51. What is the output of this shell command line in an empty directory?
```
touch .a .b .c ; echo .*
```
a. **. .. .a .b .c**
b. **.***
c. no output
d. **.a .b .c**
e. an error message from **echo** saying **.*** does not exist

52. What is the output of this successful command sequence?
```
cd /home/dir ; mkdir one ; mkdir two ; pwd
```
a. **/two**
b. **/home/dir/two**
c. **/home/dir/one/two**
d. **/home/dir**
e. **/home/dir/one**

53. In the output of the command **ls -a**, a dot that begins a name signifies what?
a. A name that is hidden.
b. A name with an unprintable character.
c. The parent directory.
d. The current directory.
e. A current file.

54. How many arguments and options are there to the command: **ls -ls /cat**
a. Two command line arguments, one of which contains two bundled options.
b. A three-letter file name and a **/cat** switch option argument.
c. Two options, no arguments.
d. Two arguments, one of which is a single option and the other is a pathname.
e. Two arguments, no options.

55. How do I change "foo" to "bar" on lines 25 to 30 in the **vim** editor?
a. **:25,30s/foo/bar/g**
b. **$ head -30 foo | tail -25 | vim s/foo/bar/**
c. **$ head -25 foo | tail -30 | echo s/foo/bar/ | vim**
d. **:25,30w foo/bar**
e. **:25,30r foo/bar**

56. Which command shows the name of the current computer:
a. **hostname**
b. **w**
c. **who**
d. **comname**
e. **users**

57. Which command line lists all possible utilities available for sorting files?
a. **man -k sort**
b. **man | grep sort**
c. **grep /etc/passwd sort**
d. **grep sort /etc/passwd**
e. **man sort**

58. If you type the command **`sort`**
which of the following key sequences will send an EOF and take you immediately back to the command prompt?
    a. **`[CTRL-R]`**
    b. **`[CTRL-U]`**
    c. **`[CTRL-D]`**
    d. **`[CTRL-C]`**
    e. **`[CTRL-L]`**

59. What can you do to get back (redo) the last command you typed to the **`bash`** (Linux) shell?
    a. Type [CONTROL]-[ALT]-[UP]
    b. Type [CONTROL]-[BACKSPACE]
    c. Use the "UpArrow" key.
    d. Use the "PageUp" key.
    e. Type [ALT]-[F2]

60. Which command pipeline outputs the count of the number of manual page titles that contain the keyword "sort"?
    a. **`wc man sort`**
    b. **`wc -k sort`**
    c. **`man sort | wc`**
    d. **`man -k sort | wc`**
    e. **`man sort ; wc`**

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Answer Key - DAT 2330 – Ian Allen – Winter 2006 - DAT 2330 Practice Test

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

Count of a: 15 25%
Count of b: 11 18%
Count of c: 14 23%
Count of d: 13 22%
Count of e: 7 12%

With 5 choices: 60

Macro .cmd split with indent: 18