1. Which one of the following command is used for searching for a pattern in one or more file(s)?  
a) cd  
b) cp  
c) paste  
d) grep

Answer: d  
Explanation: UNIX has a special family of commands for handling search requirements, and the principal member of this family is the grep command. This command scans its input for a pattern and displays the lines containing the pattern, the line numbers or filenames containing the pattern.

2. Which one of the following is the correct syntax for grep command?  
a) grep options filename(s)  
b) grep options pattern  
c) grep pattern filename  
d) grep options pattern filename(s)

Answer: d  
Explanation: grep command is used to search a file for a pattern and display both matching and non-matching lines. The syntax for using grep command is:

grep options pattern filename(s)

3. Which one of the following command will be used for searching “director” in emp.lst?  
a) grep “director”  
b) grep -v “director” emp.lst  
c) grep -director emp.lst  
d) grep “director” emp.lst

Answer: d  
Explanation: Because grep command is also a filter, it can search it’s standard input for the pattern. For example, the command grep “director” emp.lst will search the file emp.lst for the pattern “director” and will display the lines containing this pattern.

4. When the pattern is not found in a file, grep command silently returns the prompt.  
a) True  
b) False

Answer: a  
Explanation: grep command is also used as a filter for searching a pattern in a file. When the pattern is not found in the file, this command silently returns the prompt without displaying any diagnostic messages

5. grep command can be used for searching a pattern in more than one file.  
a) True  
b) False

Answer: a  
Explanation: When we use grep command with multiple filenames, it displays the filename along with the output. For example, when we search “director” in emp1.lst emp2.lst then the following result will be displayed,

$ grep “director” emp1.lst emp2.lst

6. If there are special characters in a pattern, then we’ve to enclose them in \_\_\_\_\_\_  
a) single quotes  
b) double quotes  
c) without any quotes  
d) all quotes

Answer: b  
Explanation: We’ve to quote the pattern in double quotes when it contains multiple words or special characters else they will be interpreted in some other way by the shell. If the pattern doesn’t contain multiple words, then there is no need for quoting the patter in any quotes. If the pattern contains only multiple words, then we can quote the pattern in single quotes also.

7. Which option is used with grep command for ignoring the case in pattern searching?  
a) -a  
b) -v  
c) -i  
d) -e

Answer: c  
Explanation: When we want to search a pattern using grep command and we want to ignore the case or we are not sure of the case, we’ve to use the -i option. This option ignores the case the pattern matching.

$ grep -i ‘agarwal’ emp.lst

8. grep command supports both extended and regular expressions.  
a) True  
b) False

Answer: a  
Explanation: grep command supports both categories of regular expressions. It supports basic regular expression by default and extended regular expression with -E option.

9. Which of the following is not a subset of BRE (basic regular expression) character subset?  
a) \*  
b) .\*  
c) ^$  
d) ch+

Answer: d  
Explanation: The basic regular expression character subset doesn’t contain ch+, as it is a part of the extended regular expression.

Symbols Matches

\* - matches zero or more occurrences of the previous character.

.\* - nothing or any number of characters

^$ - lines containing nothing

10. Character class is used for matching a group of characters enclosed within a pair of \_\_\_\_\_  
a) ( )  
b) “ “  
c) [ ]             
d) { }

Answer: c  
Explanation: A regular expression lets us specify a group of characters enclosed within a pair of rectangular brackets, [ ]. For example, [ra] matches either r or a.

11. The following command will match ‘Agarwal’, ‘agarwal’ and ‘agrawal’.

$ grep “[aA]g[ar][ar]wal” emp.lst

a) True  
b) False

Answer: a  
Explanation: The metacharacters [ and ] are used here to match all three agarwals. The character class [aA] matches the letter ‘a’ in both lowercase and uppercase. The model [ar][ar] matches any of the ‘aa’, ‘ar’,’ra’,’rr’.

12. Which of the following symbol is used for matching the immediately preceding character?  
a) \*  
b) $  
c) [ ]            
d) %

Answer: a  
Explanation: The asterisk (\*) refers to the immediately preceding character. It can match the previous character which can occur any number of times or not at all. For example, g\* can match a null string along with g, gg, ggg, gggg and so on.

13. Which symbol is used for matching a single character?  
a) \*  
b) .  
c) &  
d) %

Answer: b  
Explanation: A (.) matches a single character. The shell uses ? character to indicate that. The pattern g . . . will match a four character string beginning a ‘g’. The shell’s equivalent pattern is g???

14. Which of the following symbols are used for matching a pattern at specified locations?  
a) \*  
b) ^  
c) $  
d) ^ and $

Answer: d  
Explanation: Most of the regular expression character are used for matching patterns, but there are two symbols that are used for matching pattern at beginning or end of a line. These symbols are ^ and $.

^ - for matching at the beginning of a line

$ - for matching at the end of line

15. The following command will match the lines beginning with ‘2’.

$ grep “^2” emp.lst

a) True  
b) False

Answer: a  
Explanation: The ^ is used for matching at the beginning of the line.