**Chapter 1**

**Multiple Choice**

1. Once an R package is loaded, you can access it by issuing the following command:

a. open

\*b. library

c. run

d. tools

2. To access additional R manuals and references, use the following command:

\*a. help.start()

b. Rhelp()

c. full.help()

d. start.help()

3. All R commands and functions are run using what type of files?

a. Output

b. Command

\*c. Script

d. Lined

4. The three basic operations that govern R usage are:

a. Input, Computing, Listing

b. Process, Analyzing, Output

c. Input, Process, Analyzing

\*d. Input, Process, and Output

5. The R program assigns values to a variable by using the following function:

\*a. =

b. ^

c. @

d. #

6. Data that contains more than a single value or variable is called a(n)

a. complex data set

\*b. vector

c. list

d. column

7. What is printed in R when there is missing data?

a. .

**\***b. NA

c. 99

d. it is blank in the data file

8. A 3 X 4 matrix has how many rows?

a. 2

\*b. 3

c. 4

d. 12

9. A 3 X 4 matrix has how many columns?

a. 2

b. 3

\*c. 4

d. 12

10. Which R function will report the number of observations and variables in a data frame or matrix?

a. names()

b. dim()

\*c. describe()

d. str()

11. Which R function allows you to rename variable names?

\*a. names()

b. dim()

c. describe()

d. str()

12. Which R function will report variable labels and types of data?

a. names()

b. dim()

c. describe()

\*d. str()

13. Which R function will provide distribution information, including mean and range?

a. names()

b. dim()

\*c. describe()

d. str()

14. What format must your SAS code be in when imputing into R?

a. SAS data set

\*b. transport format

c. csv file

d. export format

15. In a loop, this function assigns the values to be manipulated.

\*a. for()

b. while()

c. if()

d. then()

**True/False**

16. R is an open-shareware software that can run on Unix, Windows or Mac OS.

\*a. True

b. False

17. It is difficult to update to the newest version of R.

a. True

\*b. False

18. A list of package available for uploading into R that are not included in the R base package can be found by selecting ‘Load Packages’ under the ‘Packages’ menu option.

\*a. True

b. False

19. R is unable to read in comma-delimited files, you must make it tab-delimited to read it into R.

a. True

\*b. False

20. An SPSS data file can be inputted into R.

\*a. True

b. False

21. Variable names are not case sensitive in R.

a. True

\*b. False

22. You can assign a value to a variable using the =.

\*a. True

b. False

23. A vector can contain two columns.

a. True

\*b. False

**Short Answer**

24. Describe the process of downloading and installing R.

\*Go to website, cran.r-project.org, select the operating system, select the subdirectory, and follow prompts for downloading and executing installation.

25. Describe how you get help in R.

\*If you select the help(), you can obtain a reference package that will help you.

26. Name and describe the three basic operations that govern the usage of statistical software packages.

\* Input: Import data from other packages; read in comma, tab-delimited, or ASCII raw data file; enter or create own data. Process: Conduct mathematical or statistical operations on the data. Output: List results or print results in a table, graph or chart.