**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.