

#### **R-Programming MCQ-4**

1. When can you use a matrix?

- a. When you have data with different dimensions.
- b. When you have data that is all of the same type.
- c. When you have variables of different types.
- d. When you are working with unstructured text.

2. Where are the objects created in RStudio kept and displayed?

- a. in the console
- b. in the Environment pane
- c. in the Viewer
- d. in the Terminal

3. In order to output the sequence of numbers below, what will you need to input?

30 27 24 21 18 15 12 9 6 3 0

- a. `seq(30, 3, by = -2)`
- b. `seq(30:0)`
- c. `seq(30, 0, by = -3)`
- d. `seq(30-0)`

4. Which data types are double precision by default?

- a. character variables
- b. numerical variables
- c. logical variables
- d. complex numbers

5. The default structure in R is a(n) \_\_\_\_\_.

- a. array
- b. data frame
- c. matrix
- d. vector

6. You want to quickly create a vector that has alternating element values of 10 and 20, with a total vector length of 20. Which command should you use?

a. `LETTERS[3:5]`

b. `rep(c(TRUE,FALSE),13)`

c. `rep(c(-3:-5))`

d. `rep(c(10,20),10)`

7. You create a vector in R called `many.numbers`. Which line of code will correctly multiply each element of the vector by two?

a. `many.numbers <- c(1:9)`

b. `many.numbers * 2`

c. `many.numbers <- c(1,2,3,4,5,6,7,8,9)`

d. `many.numbers <- c(1,9)`

8. Which statement concerning lists in R is true?

a. Lists, like vectors, can only contain data of one type.

b. Lists and vectors are essentially the same, but with different names.

c. Lists, unlike vectors, can only contain string and logical data types.

d. Lists, unlike vectors, can contain data of different data types.

9. Which command will bring up a list of the datasets built into R?

a. `library(help="datasets")`

b. `library("datasets")`

c. `?datasets`

d. `?data`

10. List `"ex_list"` has two vectors; the first has 1,2,3,4 and the second has 5,6,7,8. The values are sequenced from lowest to highest. Which command will retrieve the number 5 from the list?

a. `ex_list[[2]][1]`

b. `ex_list[[3]][1]`

c. `ex_list[[1]][1]`

d. `ex_list[2][1]`