

# R Exams

Statistics Exam 2019-03-14

Exam ID 00003

**Name:** \_\_\_\_\_

**Student ID:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

1. (a) ☐ (b) ☐ (c) ☐
2. (a) ☐ (b) ☐ (c) ☐
3. (a) ☐ (b) ☐ (c) ☐
4. (a) ☐ (b) ☐ (c) ☐
5. (a) ☐ (b) ☐ (c) ☐
6. (a) ☐ (b) ☐ (c) ☐
7. (a) ☐ (b) ☐ (c) ☐
8. (a) ☐ (b) ☐ (c) ☐
9. (a) ☐ (b) ☐ (c) ☐
10. (a) ☐ (b) ☐ (c) ☐
11. (a) ☐ (b) ☐ (c) ☐
12. (a) ☐ (b) ☐ (c) ☐

13. (a)  (b)  (c)

14. (a)  (b)  (c)

15. (a)  (b)  (c)  (d)  (e)

16. (a)  (b)  (c)  (d)  (e)

17. (a)  (b)  (c)  (d)  (e)  (f)  (g)

18. (a)  (b)  (c)  (d)  (e)  (f)  (g)

19. (a)  (b)  (c)  (d)

20. (a)  (b)  (c)

21. (a)  (b)  (c)

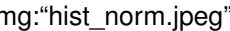
22. (a)  (b)  (c)

23. (a)  (b)  (c)  (d)  (e)

24. (a)  (b)  (c)  (d)  (e)  (f)

1. A characteristic of interest is called a parameter when it refers to the characteristic in a sample.
  - (a) Not enough information
  - (b) FALSE
  - (c) TRUE
2. The mean of quantitative variables is often represented with  $\bar{x}$  with a bar over it for the population parameter.
  - (a) FALSE
  - (b) TRUE
  - (c) Not enough information
3. What is the statistical meaning of population?
  - (a) All of the members of a group you're interested in.
  - (b) There's no such concept in statistics.
  - (c) It's always all of the people in an entire country.
4. The standard deviation of quantitative variables is often represented with a Greek sigma ( $\sigma$ ) for the sample statistic.
  - (a) TRUE
  - (b) Not enough information
  - (c) FALSE
5. Population parameters are usually represented using Roman letters (normal ABCs).
  - (a) TRUE
  - (b) Not enough information
  - (c) FALSE
6. If data are normally distributed, the mean and the medial will not be equal.
  - (a) TRUE
  - (b) Not enough information
  - (c) FALSE
7. Normally distributed data are semetrical.
  - (a) FALSE
  - (b) Not enough information
  - (c) TRUE
8. The mean is a good measure of central tendency when the data are normally distributed.
  - (a) TRUE
  - (b) Not enough information
  - (c) FALSE
9. The value for the mean is always an actual value in the data set.
  - (a) Not enough information

- (b) FALSE
  - (c) TRUE
10. The mode is always an actual value in the data set.
- (a) FALSE
  - (b) TRUE
  - (c) Not enough information
11. Variation is not important in statistics.
- (a) TRUE
  - (b) FALSE
  - (c) Not enough information
12. Variance is in squared units.
- (a) FALSE
  - (b) Not enough information
  - (c) TRUE
13. A large standard deviation means the mean represents the data well.
- (a) FALSE
  - (b) Not enough information
  - (c) TRUE
14. A small standard deviation means the mean represents the data well.
- (a) FALSE
  - (b) Not enough information
  - (c) TRUE
15. Given the following data set [1,2,3,4,5], what is the third quartile?
- (a) 1.58
  - (b) 2.5
  - (c) 4
  - (d) 3
  - (e) 2
16. Given the following data set [1,2,3,4,5], what is the range?
- (a) 3
  - (b) 1.58
  - (c) 2.5
  - (d) 2
  - (e) 4
17. Given the following data set [1,3,5,7,9], what is the mean?
- (a) 4
  - (b) 3.16

- (c) 5
  - (d) 7
  - (e) 10
  - (f) 3
  - (g) 8
18. Given the following data set [1,3,5,7,9], what is the IQR?
- (a) 10
  - (b) 5
  - (c) 4
  - (d) 7
  - (e) 8
  - (f) 3.16
  - (g) 3
19. A data point has the value of 7.5 and the mean of the data set is 10. What is the deviation score?
- (a) -3
  - (b) 7
  - (c) -2.5
  - (d) 3
20. Sometimes the scale of a plot can make differences look larger or smaller than they really are.
- (a) FALSE
  - (b) Not enough information
  - (c) TRUE
21. Boxplots are useful for seeing outliers.
- (a) Not enough information
  - (b) FALSE
  - (c) TRUE
22. Histograms are useful for seeing how data are distributed.
- (a) Not enough information
  - (b) TRUE
  - (c) FALSE
23.  Select the statements that are true.
- (a) The data are right skewed.
  - (b) The data are leptokurtic.
  - (c) The data are left skewed.
  - (d) The data are normally distributed.
  - (e) The data are platykurtic.

24. img:"box\_plat.jpeg" Select the statements that are true.

- (a) There are no outliers.
- (b) There are outliers with large values.
- (c) The data are left skewed.
- (d) There are outliers with small values.
- (e) The data are symmetrically distributed.
- (f) The data are right skewed.