

R Exams

Statistics Exam 2019-03-14

Exam ID 00001

Name: _____

Student ID: _____

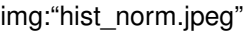
Signature: _____

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) FALSE
 - (b) TRUE
 - (c) Not enough information
2. The mean of quantitative variables is often represented with \bar{x} with a bar over it for the population parameter.
 - (a) FALSE
 - (b) Not enough information
 - (c) TRUE
3. What is the statistical meaning of population?
 - (a) It's always all of the people in an entire country.
 - (b) All of the members of a group you're interested in.
 - (c) There's no such concept in statistics.
4. The standard deviation of quantitative variables is often represented with a Greek sigma (σ) for the sample statistic.
 - (a) TRUE
 - (b) FALSE
 - (c) Not enough information
5. Population parameters are usually represented using Roman letters (normal ABCs).
 - (a) Not enough information
 - (b) FALSE
 - (c) TRUE
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) Not enough information
 - (b) FALSE
 - (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) Not enough information
 - (b) TRUE
 - (c) FALSE
11. Variation is not important in statistics.
- (a) Not enough information
 - (b) TRUE
 - (c) FALSE
12. Variance is in squared units.
- (a) Not enough information
 - (b) FALSE
 - (c) TRUE
13. A large standard deviation means the mean represents the data well.
- (a) FALSE
 - (b) TRUE
 - (c) Not enough information
14. A small standard deviation means the mean represents the data well.
- (a) FALSE
 - (b) TRUE
 - (c) Not enough information
15. Given the following data set [1,2,3,4,5], what is the third quartile?
- (a) 4
 - (b) 1.58
 - (c) 2
 - (d) 2.5
 - (e) 3
16. Given the following data set [1,2,3,4,5], what is the range?
- (a) 2.5
 - (b) 4
 - (c) 3
 - (d) 1.58
 - (e) 2
17. Given the following data set [1,3,5,7,9], what is the mean?
- (a) 7
 - (b) 8

- (c) 10
 - (d) 3
 - (e) 5
 - (f) 4
 - (g) 3.16
18. Given the following data set [1,3,5,7,9], what is the IQR?
- (a) 10
 - (b) 5
 - (c) 3.16
 - (d) 7
 - (e) 4
 - (f) 3
 - (g) 8
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) -2.5
 - (c) -3
 - (d) 7
20. Sometimes the scale of a plot can make differences look larger or smaller than they really are.
- (a) Not enough information
 - (b) FALSE
 - (c) TRUE
21. Boxplots are useful for seeing outliers.
- (a) TRUE
 - (b) FALSE
 - (c) Not enough information
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 normally distributed.
 - (b) The data are platykurtic.
 - (c) The data are leptokurtic.
 - (d) The data are right skewed.
 - (e) The data are left skewed.

24. img:"box_plat.jpeg" Select the statements that are true.

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