R Exams

Statistics Exam 2019-03-14 **Exam ID 00001**

Name: _____

Student ID: _____

Signature: _____

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

13. (a) [X] (b) [ ] (c) [ ]

14. (a) [ ] (b) [X] (c) [ ]

15. (a) [X] (b) [ ] (c) [ ] (d) [ ] (e) [ ]

16. (a) [ ] (b) [X] (c) [ ] (d) [ ] (e) [ ]

17. (a) [ ] (b) [ ] (c) [ ] (d) [ ] (e) [X] (f) [ ] (g) [ ]

18. (a) [ ] (b) [ ] (c) [ ] (d) [ ] (e) [X] (f) [ ] (g) [ ]

19. (a) [ ] (b) [X] (c) [ ] (d) [ ]

20. (a) [ ] (b) [ ] (c) [X]

21. (a) [X] (b) [ ] (c) [ ]

22. (a) [ ] (b) [X] (c) [ ]

23. (a) [X] (b) [ ] (c) [ ] (d) [ ] (e) [ ]

24. (a) [ ] (b) [ ] (c) [X] (d) [ ] (e) [ ] (f) [X]

1. **Problem**
   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

   Solution

   (a) True.
   (b) False.
   (c) False.

2. **Problem**
   The mean of quantitative variables is often represented with x with a bar over it for the population parameter.

   (a) FALSE
   (b) Not enough information
   (c) TRUE

   Solution

   (a) True.
   (b) False.
   (c) False.

3. **Problem**
   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.

   Solution

   (a) False.
   (b) True.
   (c) False.

4. **Problem**
   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

   Solution

(a) False.
(b) True.
(c) False.

5. **Problem**
Population parameters are usually represented using Roman letters (normal ABCs).

(a) Not enough information
(b) FALSE
(c) TRUE

Solution

(a) False.
(b) True.
(c) False.

6. **Problem**
If data are normally distributed, the mean and the medial will not be equal.

(a) TRUE
(b) Not enough information
(c) FALSE

Solution

(a) False.
(b) False.
(c) True.

7. **Problem**
Normally distributed data are semetrical.

(a) Not enough information
(b) FALSE
(c) TRUE

Solution

(a) False.
(b) False.
(c) True.

8. **Problem**
The mean is a good measure of central tendency when the data are normally distributed.

(a) TRUE
(b) Not enough information
(c) FALSE

Solution

(a) True.
(b) False.
(c) False.

9. **Problem**
The value for the mean is always an actual value in the data set.

(a) Not enough information
(b) FALSE
(c) TRUE

Solution

(a) False.
(b) True.
(c) False.

10. **Problem**
The mode is always an actual value in the data set.

(a) Not enough information
(b) TRUE
(c) FALSE

Solution

(a) False.
(b) True.
(c) False.

11. **Problem**
Variation is not important in statistics.

(a) Not enough information
(b) TRUE
(c) FALSE

Solution

(a) False.
(b) False.
(c) True.

12. **Problem**
Variance is in squared units.

(a) Not enough information
(b) FALSE

(c) TRUE

Solution

(a) False.
(b) False.
(c) True.

13. **Problem**
A large standard deviation means the mean represents the data well.

(a) FALSE
(b) TRUE
(c) Not enough information

Solution

(a) True.
(b) False.
(c) False.

14. **Problem**
A small standard deviation means the mean represents the data well.

(a) FALSE
(b) TRUE
(c) Not enough information

Solution

(a) False.
(b) True.
(c) False.

15. **Problem**
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

Solution

(a) True.
(b) False.
(c) False.
(d) False.

(e) False.

16. **Problem**
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

Solution

(a) False.
(b) True.
(c) False.
(d) False.
(e) False.

17. **Problem**
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

Solution

(a) False.
(b) False.
(c) False.
(d) False.
(e) True.
(f) False.
(g) False.

18. **Problem**
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

Solution

(a) False.

(b) False.

(c) False.

(d) False.

(e) True.

(f) False.

(g) False.

19. **Problem**
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

Solution

(a) False.

(b) True.

(c) False.

(d) False.

20. **Problem**
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

Solution

(a) False.

(b) False.

(c) True.

21. **Problem**
Boxplots are useful for seeing outliers.

(a) TRUE

(b) FALSE

(c) Not enough information

Solution

(a) True.
(b) False.
(c) False.

22. **Problem**
Histograms are usefule for seeing how data are distributed.

(a) Not enough information
(b) TRUE
(c) FALSE

Solution

(a) False.
(b) True.
(c) False.

23. **Problem**
img:“hist_norm.jpeg” 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.

Solution

(a) True.
(b) False.
(c) False.
(d) False.
(e) False.

24. **Problem**
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 symetrically distributed.
(d) There are outliers with large values.
(e) There are outliers with small values.
(f) There are no outliers.

Solution

(a) False.
(b) False.
(c) True.
(d) False.
(e) False.
(f) True.