Biostatistics

Archive

Lecture 5

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$\mathcal{B}$iostatistics

1. Assume that the test scores of 600 students are normally distributed with a mean of 76 and a standard deviation of 8
The number of students scoring between 70 and 82 Select one:
a 55. b. 455. C.244. d. 328. e. can't be calculated

<div align="right">Ans: D.328</div>

2. 1000 students in Jordanian university Took a standardized test that is normally distributed and has a mean of 350 and a variance of 225, Here are the scores for 3 students Sara scored 350, Murad scored 320 and Khalaf 390: What proportion of the students would be expected to score below Murad?
Select one
a. 0.0227. b. 0.0690. C.0.9350. d.0.9773. e 0.0440

<div align="right">Ans: A. 0.0227</div>

3. "1000" students in Jordanian university took a standardized test that is normally distributed and has a mean of 350 andvariance of 225 here are the scores
for 3 students: Sara scored 350 Murad scored 320 and Khalaf 390 in this sample how many students would be
expected to score above Khalaf? Select one:
a. 12. b. 4. C.8. d. 60. e. 100

<div align="right">Ans:B. 4</div>

4. The proportion of area under normal curve between z equal to - 1.16 and the mean is?
Select one
a. 11.79%. b.61.79%. c. 37.7% d.50%. e. Can't be calculated

<div align="right">Ans:C. 37.7%</div>

5. fi the Sample size equal to 256 teachers, and the Mean Systolic blood pressure equal to 120 mmHg. and the Standard deviation equal to 6. So, the percentile ranks of a teacher whose blood pressure equal to 126 mmHg is? Select one:
a. 20th. b. 65th. c.3rd. d. 84th. e. Can't be calculated

<div align="right">Ans:D.84th</div>

6. The Z-score corresponding to the 89 the percentile is? Select one:
a. 2.44. b. 1.05. C. 0.88. d. 1.23. e. 0.48

<div align="right">Ans:D.1.23</div>

7. One is not correct at statement, regarding the normal distribution curve it is?
Select one
a. Determined by Standard deviation and mean
b. Standard deviation and mode
c. Bell shape
d. Used for calculation of confidence interval
e. Used for justification of confidence interval

<div align="right">Ans:B.Standard deviation and mode</div>

8. Assume that the test scores of 500 students are normally distributed with a mean of 80 and a standard deviation of 4
The number of students scoring between 86 and 82 ? Select one
a. 155. b. 146. C. 121. d. 228. e. cant be calculated

Ans:C.121

9. Area under the curve in normal distribution curve by more than 3 S.D on both sides is? Select one:
a. 33%   b. 68%. c. 5%   d. 95%   e. 1%

Ans:E.1%

10. in a normal distribution with mean 40 and variance 16 at what percentile rank does a score of 50 falls? Select one:
a. 99.38%. b. 82.57%. C. 49.18% d. 12.44% e. 50.85%

Ans:A. 99.38%

11. The percent of area of normal curve between z=-0.97 and the mean is? Select one:
a. 11.79 %. b. 61.79 % c. 33.40 % d. 50.33 %. e. Can't be calculated
Ans:C. 33.4%

12. Given that a distribution has a mean of 32 and a standard deviation of 4 what score will be associated with a standard
Z score of 2? Select one
a.26.   b. 32.   c. 38.   d. 40.   e. 42

Ans:D. 4 0

13. Which is incorrect statement regarding the standard normal distribution?
Select one:
a. Mean equal to zero
b.Standard deviation equal to 1
C. Standard normal distribution may be not symmetrical
d. For a distribution to be normal, a certain proportion of the entire area must occur between specific values of the standard deviation
e. Standard normal distribution have a graph and equation
                    Ans:C. Standard normal distribution may be not symmetrical
14. If the birth weight of each of the 100 babies born in a hospital during April was found to be 2.25 kg then the standard deviation of this sample will be:
a 2.25
b.0
c.1
d.025
e.0025

Ans:B.0

15.In a group of 100 women the mean weight of is 60 kg.
The standard deviation is 1.25 kg Which one of the following is true? Select one
a.95% of all women weight between 55 and 65 kg
b.95% of all women weight between 57.5 and 62.5 kg
c.99% of all women weight between 55 and 65 kg
d.99% of all women weight between 57.5 and 62.5 kg
e.68% of all women weight between 55 and 65 kg

Ans:B.95% of all women weight between 57.5 and 62.5 kg

16. Covering 95% of the population under the normal
distribution curve we have to? Select one:
a. Move one S. E above and one SE below mean
b. Move 1.645 SE. above and below the mean:
C. Move 1.96 S.E above and below the mean
d. Move 2 58 SE above and below the mean
e. Move 3 S.E above and 3 S. E below mean

Ans:C. Move 1.96 S.E above and below the mean

17. In the normal distribution curve, the mean+- 3 standard deviations cover?
Select one:
a. 60%. b. 65%. c. 95%. d. 99%. e. 5%

Ans:D.99%

18. Which is CORRECT statement regarding the symmetrical distribution?
Select one:
a Standard deviation equal to 1
b Mean equal to zero
c. Symmetrical distribution have a graph and equation
d. Al Symmetrical Distibution's must be standard normal distributions
e Adistribution is symmetrical fi the mean, median and mode are at the same location

Ans:E. Adistribution is symmetrical fi the mean, median and mode are at the same location

19. The state or quality of fatness of peakedness of a distribution called?
Select one:
a Multi-modal.
B.Kurtosis.
C.Symmetrical.
D. Positivly Skewed.
e. Negativly Skewed

Ans:B.Kurtosis.

20. Gaussian distribution are characterized by all of the following EXCEPT? Select one:

a. It is bell shaped, continuous curve b. The traits never touch the base

c. The mean mode and the median values are equal to one

d.It is described by two parameters the mean and standard deviations

e.About 68% of me probability under the curve tables within one standard deviation around the mean

Ans:c. The mean mode and the median values are equal to one

21. The mean body weight in a group of 100 adult males is 170 lb with a S.D 1.5 lb one statement is correct?

Select one:

a. 95% of population weights fall between 167-173 lb

b. 95% of population weights fall between 168.5-171.5 lb C. 68% of population weights fall between 167-173 lb

d. None of population weight more than 175 lb

e. None of population weight Is less than 165 lb

Ans:a. 95% of population weights fall between 167-173 lb

22. What percent of the area of a distribution lies between the first and third Quartiles? Select one:

a. 25. b. 50. C. 68. d. 75

e. The question can't be answered without knowledge of the specific distribution

Ans:B. 50

23. Which is INCORRECT statement about the symmetrical distribution?

Select one

a. if a distribution is asymmetrical it is considered to be skewed

b. The tail of a distribution indicates the type of skewness c. The symmetry of variation indicated by skewness

d. If the tail goes to the left the distribution is skewed to the right and is positively skewed

e. A symmetrical distribution has no skewness

Ans:d. If the tail goes to the left the distribution is skewed to the right and is positively skewed

24. distribution is relatively flat in the middle and has thin tail: it has?

Select one

a. Negative skewness.

b. Little Kurtosis

C. Positive skewness.

d. Multi-modal.

e. Large Kurtosis

Ans:B.Little Kurtosis

25. Gaussian distributionare characterized by all of the following EXCEPT? Select one:
a. it is bell shaped, continuous curve
b. The tail never touch the base
c. The mean equal one and the standard deviation equal zero
d.it is described by two parameters the mean and standard deviations
e. About 95% of the probability under the curve tall within two standard deviation around the mean

Ans:c. The mean equal one and the standard deviation equal zero

26. Given a distribution with a mean of 32 and a S.D of 4. The score that will be associated with a standard scores of 1.5:
a. 42
b. 40
c. 26
d. 32
e. 38

e. 38

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