



QUIZ TIME

Bio- statistics lec4

Done by:

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Question 1

The area under the standard normal curve between $Z = -1$ and $Z = 1$ represents approximately what percentage of the data?

- A. 34%
- B. 50%
- C. 68%
- D. 95%

Answer: C. 68%

Question 2

The ages of five students in a study group are:

17, 18, 18, 20, 22.

What is the standard deviation of their ages? (Rounded to one decimal place)

- A. 1.5
- B. 1.9
- C. 2.0
- D. 2.2

Answer : C

Question 3

If a histogram is bimodal, what is the most statistically plausible explanation?

- A. Data has extreme outliers
- B. A single homogeneous population
- C. The data is normally distributed
- D. The sample may contain two different populations

Answer: D. The sample may contain two different populations

Question 4

Which characteristic is shared by all symmetrical distributions, whether or not they are normal?

- A. The median equals the mean
- B. The data is evenly spaced
- C. There is only one peak
- D. There are no outliers

Answer: A. The median equals the mean

Question 5

Which of the following best describes a uniform distribution?

- A. All data values are equal
- B. Data is clustered tightly around the mean
- C. Frequencies are approximately the same across all intervals
- D. The data gradually increases toward the right

Answer: C. Frequencies are approximately the same across all intervals

Question 6

A distribution shows a sharp peak and heavy tails. This implies the data has:

- A. Low variability**
- B. High kurtosis**
- C. Negative skewness**
- D. A uniform pattern**

Answer: B. High kurtosis

Question 7

Which of the following best describes kurtosis in a distribution?

- A. Asymmetry of data**
- B. Number of modes**
- C. Sharpness of the peak and tails**
- D. Spread of the data**

Answer: C. Sharpness of the peak and tails

Question 8

A histogram with a long tail on the left is described as:

- A. Positively skewed**
- B. Symmetrical**
- C. Negatively skewed**
- D. J-shaped**

Answer: C. Negatively skewed

Question 9

Which of the following histograms would most likely indicate that data were collected under inconsistent conditions, possibly involving multiple underlying processes?

- A. Symmetrical bell-shaped curve**
- B. Positively skewed distribution**
- C. Bimodal distribution**
- D. Uniform distribution**

Answer: C. Bimodal distribution

Question 10

A symmetrical distribution is not necessarily normal because:

- A. It may have more than one mode**
- B. The data could be qualitative**
- C. Skewness is undefined**
- D. All symmetrical distributions are normal by definition**

Answer: A. It may have more than one mode