



QUIZ TIME

Bio- statistics lec7

Done by:

Lemar mustafa

Type I error occurs when:

- a) We reject H_0 when it is true
- b) We reject H_0 when it is false
- c) We accept H_0 when it is false
- d) We accept H_0 when it is true

Answer: a) We reject H_0 when it is true

Type II error occurs when:

- a) We reject H_0 when it is true
- b) We accept H_0 when it is false
- c) We reject H_0 when it is false
- d) We accept H_0 when it is true

Answer: b) We accept H_0 when it is false

The probability of committing a Type I error is represented by:

- a) β
- b) α
- c) p-value
- d) $1 - \beta$

Answer: b) α

The probability of committing a Type II error is represented by:

- a) α
- b) $1 - \alpha$
- c) β
- d) p-value

Answer: c) β

If the p-value $< \alpha$, what is the correct decision?

- a) Fail to reject H_0
- b) Accept H_0
- c) Reject H_0
- d) Accept H_a without testing

Answer: c) Reject H_0

If $\beta = 0.25$, then the power of the test is:

- a) 0.25
- b) 0.50
- c) 0.75
- d) 1.25

Answer: c) 0.75



QUIZ TIME

Bio- statistics lec8

Done by:

Lemar mustafa

Which distribution is a little shorter and wider than a normal distribution?

Options:

- A) Normal distribution
- B) t-distribution
- C) Chi-square distribution
- D) F-distribution

Answer:

- B) t-distribution

The expected value of a random variable is equal to:

Options:

- A) Sample mean
- B) Population or true mean
- C) Mode
- D) Median

Answer:

- B) Population or true mean

Why does the t-distribution not follow the 68-95-99 rule?

Options:

- A) Because it is discrete
- B) Because it is not normal
- C) Because it has no mean
- D) Because it only applies to large samples

Answer:

- B) Because it is not normal

Which of the following is a measure of spread for a sampling distribution?

Options:

- A) Sample mean
- B) Standard deviation of the population
- C) Standard error
- D) Median

Answer:

- C) Standard error