

Guideline Quizzes for Module 5

Question 1

1 point

What is a population?

Choose at least one correct answer

☒ (A) The entire group of individuals or objects being studied

Correct answer

☐ (B) A small group of individuals selected for study

☐ (C) A random selection of individuals from a larger group

☐ (D) A subset of a larger group used for analysis

Question 2

1 point

What is the primary purpose of sampling in statistics?

Choose at least one correct answer

☐ (A) To collect as much data as possible

☒ (B) To make generalizations about a population

Correct answer

☐ (C) To avoid bias in research

☐ (D) To study every individual in a population

Question 3

1 point

A sample is always smaller than a population.

☒ (A) True

Correct answer

☐ (B) False

Question 4

1 point

Sampling is necessary when studying large populations.

☒ A True

Correct answer

☐ B False

Question 5

1 point

What is statistical uncertainty?

Choose at least one correct answer

☐ A The error in a measurement

☐ B The bias in a sample

☒ C The inability to predict the exact outcome of an event

Correct answer

☐ D The variability in data

Question 6

1 point

How can uncertainty be reduced in statistical studies?

Choose at least one correct answer

☒ A By increasing the sample size

Correct answer

☐ B By using biased sampling methods

☐ C By ignoring outliers in the data

☐ D By making assumptions about the population

Question 7

1 point

Which of the following is a source of uncertainty in statistical inference?

Choose at least one correct answer

☒ A Measurement error

☐ (B) Random variation

☒ (C) Sampling error

Correct answer

☐ (D) All of the above

Question 8

1 point

Uncertainty can be completely eliminated in statistical studies.

☐ (A) True

☒ (B) False

Correct answer

Question 9

1 point

Larger sample sizes can lead to lower uncertainty.

☒ (A) True

Correct answer

☐ (B) False

Question 10

1 point

Match the following terms with their definitions

Prompt

Answer

☒ (1) Population

The entire group of individuals or objects being studied

Partial: 20% Negative: 0%

☒ (2) Sample

A subset of a population used to represent the whole

Partial: 20% Negative: 0%

☒ (3) Sampling

The process of selecting a subset of a population to study

Partial: 20% Negative: 0%

☒ (4) Uncertainty

The inability to predict the exact outcome of an event

Partial: 20% Negative: 0%

⑤ Statistical Inference

The process of drawing conclusions about a population based on a sample

Partial: 20% Negative: 0%