If you are conducting a study on the impacts of diet and exercise on high blood pressure and you take a proportional sample based upon race/ethnicity, this would be an example of:

Simple random sample

Cluster sampling

Stratified sampling

Convenience sampling

If a researcher does not select the appropriate level of significance (alpha) based upon prior research or industry standard and concludes that the study found a statistical difference when in fact there was no difference, this is referred to as:

Validity

Reliability

Type I error

Type II error

To obtain a sample of 20 patients in ICU, clinician goes to the ICU and selects the current patients. This is an example of a:

Judgement sampling

Simple random sampling

Snowball sampling

Convenience sampling

Scenario Based Question: If you were conducting a study of blood pressure readings in a hospital unit, compared AM and PM readings, and assumed the data were normally distributed and variances were equal, what type of statistical test would be conducted?

Separate variance t-test

Paired t-test

Pooled variance t-test

F-test

Which of the following can be reduced by proper interviewer training?

Neither sampling error nor measurement error

Sampling error

Both sampling error and measurement error

Measurement error

Which of the following would be an appropriate null hypothesis?

The mean of a sample is equal to 65.

The mean of a population is greater than 65.

The mean of a population is equal to 65.

The mean of the sample is greater than 65.

In a research study, if the sample size is too low and the results do not find a statistical difference when in fact there is a difference, this is referred to as:

Validity

Reliability

Type I error

Type II error

Quantitative research strives for quality and the ability to apply the analysis to a broader population. This is referred to as:

Validity

Normality

Generalization

Reliability

A Type I error is committed when:

We reject a null hypothesis that is true.

We do not reject a null hypothesis that is true.

We reject a null hypothesis that is false.

We do not reject a null hypothesis that is false.

A Type II error is committed when:

We reject a null hypothesis that is true.

We do not reject a null hypothesis that is false.

We do not reject a null hypothesis that is true.

We reject a null hypothesis that is false.