Knowledge Check

A statement made about a population for a testing purpose is called:

A.   Statistics

B.   Hypothesis

C.   Parameter estimate

D.   Test statistics

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The correct answer is **B**

A hypothesis in statistics is a proposed explanation or assumption about a population parameter made to test through statistical analysis.

What does critical region lead to?

A.   Acceptance of the null hypothesis

B.   Rejection of null hypothesis

C.   Depends upon whether the test is one- or two-sided

D.   Depends on the sample size

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The correct answer is **B**

The critical region leads to the rejection of the null hypothesis.

In the context of hypothesis testing, what does a Type I error represent?

A.   Accepting a true null hypothesis

B.   Rejecting a false null hypothesis

C.   Rejecting a true null hypothesis

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The correct answer is **C**

A Type I error occurs when the null hypothesis is true but is rejected incorrectly. It's a false positive.

Thank You