



Semester :

Subject : Statistics for AI&DS

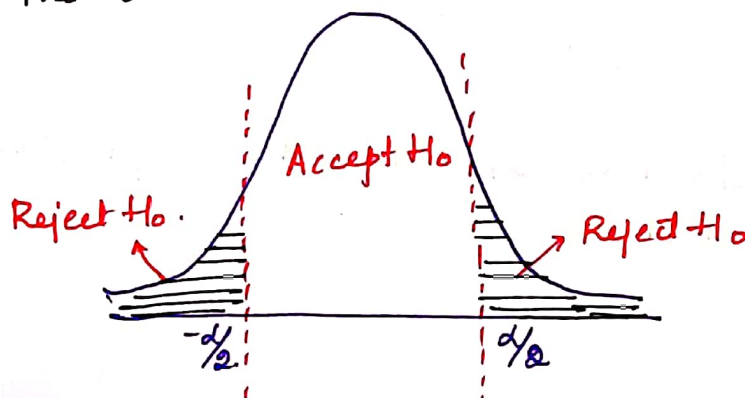
Academic Year: 2023-2024

TWO TAILED HYPOTHESIS AND ONE - TAILED HYPOTHESES.

Two-Tailed Hypothesis:

A test of a hypothesis, where the area of rejection is on both sides of the sampling distribution is called a two-tailed test.

If we are using a significance level of 0.05, a two-tailed test allots half of alpha ($\alpha/2$) to test the statistical significance in one direction and half of the alpha ($\alpha/2$) to test statistical significance in the other direction.



We use Two-tailed hypothesis when $\mu = \bar{X}$.

One-Tailed Hypothesis:

A test of a statistical hypothesis, where the area of rejection is on only one side of the sampling distribution is called one-tailed test.

If we are using a significance level of 0.05, a one-tailed test allots all of alpha (α) to test the