HIGH YEILD

Hypothesis

STATEMENT ABOUT PARAMETERS IN A POPULATION OR POPULATIONS. WE WANT TO KNOW HOW LIKELY THIS IS TO BE TRUE, GIVEN THE EVIDENCE (DATA)

. FOR EXAMPLE

1. AVERAGE NUMBER OF BEDS FILLED PER DAY IN THE HOSPITAL
2. AVERAGE NUMBER OF MINUTES PER DAY THE DOCTOR SPENDS WITH A PATIENT
3. AVERAGE LEAD CONTENT OF WATER FOR A HOUSING PROJECT

Null hypothesis

—HO—THE HYPOTHESIS TO BE TESTED. THIS IS USUALLY A STATEMENT OF NO DIFFERENCE. THE POPULATION VALUE OF THE PARAMETER IS NOT DIFFERENT FROM SOME SPECIFIED VALUE.

Alternative hypothesis

—H1 OR HA—THIS IS THE STATEMENT WE WILL ACCEPT IF WE REJECT THE NULL HYPOTHESIS.

Test of hypothesis		
	Truth	
Results of Test	H_0	H_1
Accept H_0	Correct decision	Type II error
Reject H_0	Type 1 error	Correct decision

Type I error
is the probability of rejecting Ho when Ho is true.

Type II error
is the probability of accepting Ho when H1 is true.

<u>alfa</u> (0.05 or 0.01)
Acceptance Region These are the values
of X for which Ho is accepted.
Rejection Region—These are the values of
X for which Ho is rejected.

Level of significance

Alfa " Probability of a Type I error. This is the area under the curve below (or above) the critical value.
This is the probability of rejecting Ho when Ho is true.
beta" Probability of a Type II error.
 1-beta—Power of a test. This is the
Pr (rejecting Ho|H1 is true).

الطب و الجراحة لجنة