

## STATISTICS WORKSHEET-1

1. In hypothesis testing, type II error is represented by  $\beta$  and the power of the test is  $1-\beta$  then  $\beta$  is:

**b. The probability of failing to reject  $H_0$  when  $H_1$  is true.**

2. In hypothesis testing, the hypothesis which is tentatively assumed to be true is called the

**b. null hypothesis**

3. When the null hypothesis has been true, but the sample information has resulted in the rejection of the null, a \_\_\_\_\_ has been made

**d. Type I error**

4. For finding the p-value when the population standard deviation is unknown, if it is reasonable to assume that the population is normal, we use

**b. the t distribution with  $n - 1$  degrees of freedom.**

5. A Type II error is the error of

**a. accepting  $H_0$  when it is false**

6. A hypothesis test in which rejection of the null hypothesis occurs for values of the point estimator in either tail of the sampling distribution is called

**d. a two-tailed test**

7. In hypothesis testing, the level of significance is

**b. the probability of committing a Type I error**

8. In hypothesis testing,  $\beta$  is

**a. the probability of committing a Type II error**

9. When testing the following hypotheses at an  $\alpha$  level of significance

$H_0: p = 0.7$

$H_1: p > 0.7$

The null hypothesis will be rejected if the test statistic  $Z$  is

**$\alpha. z > z\alpha$**

10. Which of the following does not need to be known in order to compute the P-value?

***c. the level of significance***

11. The maximum probability of a Type I error that the decision maker will tolerate is called the

***a. level of significance***

12. For t distribution, increasing the sample size, the effect will be on

***a. Degrees of Freedom***