Statistics Worksheet-8_Assignment

QUES 1: In hypothesis testing, type II error is represented by β and the power of the test is 1−β then β is:

Answer: A. The probability of rejecting H0 when H1 is true.

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

Answer. B. Null Hypothesis.

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

Answer. D. Type I error

QUES 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

Answer. B. the t distribution with n - 1 degrees of freedom.

QUES 5. A Type II error is the error of

Answer. C. rejecting Ho when it is false

QUES 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

Answer. D. A two-tailed test

QUES 7. In hypothesis testing, the level of significance is

Answer. B. The probability of committing a Type I error

QUES 8. In hypothesis testing, b is

Answer. A. the probability of committing a Type II error

QUES 9. When testing the following hypotheses at an α level of significance H0: p = 0.7 H1: p > 0.7 The null hypothesis will be rejected if the test statistic Z is

Answer. A. $Z > Z\alpha$

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

Answer. C. the level of significance.

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

Answer. A. level of significance.

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

Answer. A. Degrees of Freedom

QUES 13. What is Anova in SPSS?

Answer. ANOVA in SPSS, is used for examining the differences in the mean values of the dependent variable associated with the effect of the controlled independent variables, after taking into account the influence of the uncontrolled independent variables.

QUES 14. What are the assumptions of Anova?

Answer. There are three primary assumptions in ANOVA:

1) The responses for each factor level have a normal population distribution.
2) These distributions have the same variance.
3) The data are independent.

QUES 15. What is the difference between one way Anova and two way Anova?

Answer. The only difference between one way Anova and two way Anova is that the number of independent variables. A one-way ANOVA has one independent variable, while a two-way ANOVA has two independent variable.