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

   Ans: 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**

   Ans: 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**

   Ans: 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

Ans: b. the t distribution with n - 1 degrees of freedom

5. **A Type II error is the error of**

   Ans: b. accepting Ho when it is true

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

Ans: d. a two-tailed test

7.In hypothesis testing, the level of significance is

Ans: b. the probability of committing a Type I error

8. In hypothesis testing, b is

Ans: a. the probability of committing a Type II error

9. When testing the following hypotheses at an α 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

Ans: a. $z > z_\alpha$

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

Ans:d. All of the above are needed

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

Ans: a. level of significance

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

Ans: d. All of the Above

13. What is Anova in SPSS?

The one-way analysis of variance (ANOVA) is used to determine whether there are any statistically significant differences between the means of two or more independent (unrelated) groups

14. What are the assumptions of Anova?

There are Three basic assumptions used in ANOVA: The populations from which the samples were taken are normally distributed. Homogeneity of variance ▪ Random sampling. This compares the variation between groups (group means to overall mean) to the variation within groups (individual values to group means).

15. What is the difference between oneway Anova and twoway Anova?

In a one-way ANOVA, it focuses on simply one independent variable and one dependent variable. However, variables rarely exist in isolation in the real world. The two way ANOVA focuses on two independent variables to examine these more complex, real-life situations, thus increasing the external validity of the study.