STATISTICS WORKSHEET-3

Ans.1) b) Total Variation = Residual Variation + Regression Variation

Ans.2) c) binomial

Ans.3) a) 2

Ans.4) a) Type-I error

Ans.5) c) Level of confidence

Ans.6) b) Increase

Ans.7) b) Hypothesis

Ans.8) d) All of the mentioned

Ans.9) a) 0

Ans.10) Bayes' theorem describes the probability of occurrence of an event related to any condition. It is named after 18th-century British mathematician Thomas Bayes. The theorem is a mathematical formula for determining conditional probability. It is also known as the formula for the probability of "causes".

Ans.11) Z-score is a statistical measurement that describes a value's relationship to the mean of a group of values. Z-score is measured in terms of standard deviations from the mean. If a Z-score is 0, it indicates that the data point's score is identical to the mean score.

Ans.12.) A statistical test that is used to compare means of two groups is called as t-test. It is often used in hypothesis testing to determine whether a process or treatment actually has an effect on the population of interest, or whether two groups are different from one another.

Ans.13) A percentile is a comparison score between a particular score and the scores of the rest of a group. It shows the percentage of scores that a particular score surpassed. For example, if you score 75 points on a test, and are ranked in the 85th percentile, it means that the score 75 is higher than 85% of the scores.

Ans.14) An ANOVA test is a type of statistical test used to determine if there is a statistically significant difference between two or more categorical groups by testing for differences of means using variance.

Another Key part of ANOVA is that it splits the independent variable into 2 or more groups. For example, one or more groups might be expected to influences the dependent variable while the other group is used as a control group, and is not expected to influence the dependent variable.

Ans.15) ANOVA is helpful for testing three or more variables. It is similar to multiple two-sample t-tests. However, it results in fewer type I errors and is appropriate for a range of issues. ANOVA groups differences by comparing the means of each group and includes spreading out the variance into diverse sources.