

STATISTICS WORKSHEET-3

1. Which of the following is the correct formula for total variation?

Ans- Total Variation=Residual Variatin-Regression Variation

2. Collection of exchaneable binary outcomes for the same covaritate data are called_____outcomes.

Ans-Random

3. How many outcomes are possible with Bernoulli trial?

Ans-2

4. If Ho is true and we reject it is called?

Ans-Type-1 error

5. Level of significance is also called?

Ans- level of confidence

6. The chance of rejecting a true hypothesis decreases when sample size is:

Ans-None

7. Which of the following testing is concerned with making decision using data?

Ans- Hypothesis

8. What is the purpose of multiple testing in statistics inference?

Ans- All the mentioned

9. Normalized data are centred at __ and have units equal to standard deviation of the original data

Ans- 0

10. What is Baye's Theorem?

Ans- Baye's Theorem states that conditional probability of an event based on the occurrence of another event is equal to the likelihood of the second event given the first event multiplied by the probability of the first event.

11. What is z-score?

Ans- Z-score is a statistical measure that tells you how far is a data point from the rest of the dataset. In a more technical term, Z-score tells how many standard deviation away a given observation is from the mean.

12. What is t-test?

Ans- A t-test is a statistical test that compares the means of two samples. It is used in hypothesis testing, with a null hypothesis that the difference in group means is zero and an alternate hypothesis that the difference in group means is different from zero.

13. What is percentile?

Ans- A percentile is a comparison score of the rest of a group. It shows the percentage of scores that a particular score surpassed.

14. What is ANOVA?

Ans-Analysis of variance, or ANOVA is a statistical method that separates observed variance data into different components to use for additional tests. A one-way ANOVA is used for three or more groups of data to gain information about the relationship between the dependent and independent variables.

15. How can ANOVA help?

Ans-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.