ASSESMENT – 3

STATISTICS WORKSHEET-3

1. Which of the following is the correct formula for total variation?
   * **Total Variation = Residual Variation + Regression Variation**
2. Collection of exchangeable binary outcomes for the same covariate data are called outcomes.
   * **binomial**
3. How many outcomes are possible with Bernoulli trial?
   * **2**
4. If Ho is true and we reject it is called
   * **Type-I error**
5. Level of significance is also called:
   * **Confidence coefficient**
6. The chance of rejecting a true hypothesis decreases when sample size is:
   * **Increase**
7. Which of the following testing is concerned with making decisions using data?
   * **Hypothesis**
8. What is the purpose of multiple testing in statistical inference?
   * **All of the mentioned**
9. Normalized data are centred at and have units equal to standard deviations of the original data
   * **0**
10. What Is Bayes' Theorem?

**Ans :- Bayes' theorem describes the probability of occurrence of an event related to any condition. It is also considered for the case of conditional probability. Bayes theorem is also known as the formula for the probability of “causes”.**

1. What is z-score?

**Ans :- A z score is simply defined as the number of standard deviation from the mean. The z-score can be calculated by subtracting mean by test value and dividing it by standard value. Where x is the test value, μ is the mean and σ is the standard value.**

1. What is t-test?

**Ans :- The t-test is a test that is mainly used to compare the mean of two groups of samples. It is meant for evaluating whether the means of the two sets of data are statistically significantly different from each other. There are many types of t-test**.**.**

1. What is percentile?

**Ans :- 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 85 th percentile, it means that the score 75 is higher than 85% of the scores.**

1. 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.**

1. How can ANOVA help?

**Ans :- A nalysis of variance (ANOVA) is a statistical technique that is used to check if the means of two or more groups are significantly different from each other. ANOVA checks the impact of one or more factors by comparing the means of different samples**