STATISTICS WORKSHEET-3
ANSWER SHEET

Q1 to Q9 have only one correct answer. Choose the correct option to answer your question.

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

   b) Total Variation = Residual Variation + Regression Variation

2. Collection of exchangeable binary outcomes for the same covariate data are called_____outcomes.

   c) binomial

3. How many outcomes are possible with Bernoulli trial?
   a) 2

4. If Ho is true and we reject it is called
   a) Type-I error

5. Level of significance is also called:

   b) Size of the test

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

   a) Increase

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

   a) Hypothesis

8. What is the purpose of multiple testing in statistical inference?
   a) Minimize errors

9. Normalized data are centred at____and have units equal to standard deviations of the original data
   a) 0

Q10and Q15 are subjective answer type questions, Answer them in your own words briefly.

10. What Is Bayes' Theorem?
11. What is z-score?
12. What is t-test?
13. What is percentile?
14. What is ANOVA?
15. How can ANOVA help?

ANSWER Q10 TO Q15 :-

10. The Bayes theorem is a mathematical formula for calculating conditional probability in probability and statistics.

11. Z-score indicates how much a given value differs from the standard deviation.

12. 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. Percentile is the percentage of scores that range between 0 and 100 which is less than or equal to the given set of distribution.

14. An Anova is a type of statistical test used to determine if there is a statistically significant Difference between two of more categorical groups by testing for differences of means Using variance.

15. The one-way ANOVA can help you know whether or not there are significant differences between the means of your independent variables.