WORKSHEET_3

Statistics worksheet 3

- **1.** (b) Total Variation = Residual Variation +Regression Variation
- **2.** (c) Binomial
- 3. (a) 2
- 4. (a) Type-1 Error
- **5.** (b) Size of the test
- 6. (b) Increase
- 7. (b) Hypothesis
- 8. (d) All of the Mentioned
- **9.** (b) 5
- 10. <u>Bayes' Theorem:</u> Bayes' theorem states that the conditional probability of an event based on the existence of alternative event.
- 11. Z-Score indicates how much a given value differs from the standard deviation. If a Z-score is 0, It signifies that the data point's score is identical to the mean score. Z-Score also tells where the value lies in the distribution. Z-score can be negative if they are below the mean.

- 12. A t-Test is a statistical test that is used to compare the MEANS of two groups. It is used in hypothesis testing to decide whether two groups are different from one another.
- 13. Percentiles indicate the percentage of scores that fall below a specific value. It tells where a score stands relative to other scores. For example, 75th percentile MEANS that the value at which 25% of the answers lie above that value and 75% of the answer lie below that value.
- 14. ANOVA, is statistical method that is used for three or more groups of data, to gain information about the relationship between the dependent and independent variable. ANOVA helps you find out whether the differences between groups of data are statistically important.
- 15. ANOVA is helpful for testing three or more variables.

 ANOVA groups differences by comparing the MEANS of each group and includes spreading out the variance into diverse sources.