## **STATISTICS WORKSHEET-3**

## **ANSWERS:**

- 1. (b) Total Variation = Residual Variation + Regression Variation
- 2. (c) binomial
- 3. (a) 2
- 4. (a) Type-I error
- 5. (d) Confidence coefficient
- 6. (a) decrease
- 7. (b) Hypothesis
- 8. (d) All of the mentioned
- 9. (a) 0
- 10. In probability, Bayes Theorem is a mathematical formula, which is used to determine the conditional probability of the given event. It could be used to make predictions about the weather.
- 11.A Z-score is a numerical 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.
- **12.**A t-test is an inferential **statistic** used to determine if there is significant difference between the means of two groups and how they are related.
- 13. Percentile or centile is a value or number that represents a percentage position on a range or list of data the person or thing at that number of value is above that number in percentage.
- **14.**ANOVA (Analysis Of Variance) is a collection of statistical models used to assess the differences between the means of two independent groups by separating the variability into systematic and random factors.
- 15.ANOVA can help to identify the sources of variation in a data set. This can help to improve the accuracy of data predictions and analyses. ANOVA can help to identify relationships between different variables in a data set. This information can be used to improve data models and predictions.