STATISTICS WORKSHEET:

1. (a) True
2. (a) Central Limit Theorem
3. (b) Modelling bounded count data
4. (d) All of the mentioned
5. (c) Poisson
6. (b) False
7. (b) Hypothesis
8. (a) 0
9. (c) Outliers cannot conform to the Regression Relationship
10. The normal distribution, also known as the Gaussian distribution, is a symmetric probability distribution centered on the mean, indicating that data around the mean occur more frequently than data far from it. The normal distribution will show as a bell curve on a graph.
11. Mean or Median Imputation | Multivariate Imputation by Chained Equations | Random Forest
12. A basic randomized control experiment is A/B testing. It's a method of comparing two versions of a variable in a controlled setting to see which performs better.
13. Mean imputation is the process of replacing null values in a data set with the data's mean. Mean imputation is often seen to be a bad idea since it overlooks feature correlation. Consider the case below: We have a table with age and fitness ratings, and a fitness score for an eight-year-old is missing. If we average the fitness ratings of persons aged 15 to 80, the eighty-year-old will appear to have a far higher level of fitness than he actually does. Second, mean imputation reduces variance while increasing bias in our data. The model is less accurate as a result of the lower variance, and the confidence interval is smaller.
14. The connection between two quantitative variables is estimated using simple linear regression. It enables us to predict how a dependent variable will vary when the independent variable(s) changes. By fitting a line to the observed data, linear regression describes the connection between variables. A straight line is used in linear regression models, whereas a curved line is used in logistic and nonlinear regression models.
15. Descriptive and Inferential statistics are the two main disciplines of statistics. Inferential statistics allows you to create predictions ("inferences") from data. Descriptive statistics describes the data (for example, a chart or graph) from that data.