STATISTICS WORKSHEET-1

Q.1. Answer- A) True

Q.2. Answer- A) Central Limit Theorem

Q.3. Answer- B) Modeling bounded count data

Q.4. Answer- D) All of the mentioned

Q.5. Answer- C) Poisson

Q.6. Answer- B) False

Q.7. Answer- B) Hypothesis

Q.8. Answer- A) 0

Q.9. Answer-C) Outliers cannot confirm to the regression relationship

Q.10. Answer-

Normal Distribution- It is proper term for a probability bell curve. It is a probability distribution which means it is symmetric about the mean, showing the data near the mean are more frequent in occurrence than data far from the mean. It appears as a bell curve in graph form. It is also known as the Gaussian distribution.

Q.11. Answer- Mean, Median and Mode is used to handle the missing data. Imputation technique is used to handle the missing data. Multiple imputation techniques I recommend.

Q.12. Answer-

A/B Testing- An AB test is an example of statistical hypothesis testing. It is a process whereby a hypothesis is made about the relationship between two data sets and those data sets are then compared against each other to determine if there is a statistically significant relationship or not.

Q.13. Answer- Mean imputation is not acceptable practice because it ignores feature correlation and also decreases the variance of our data while increasing bias. As a result of the reduced variance, the model is less accurate and the confidence interval is narrower.

Q.14. Answer-

Linear Regression in Statistics- Linear regression analysis is used to predict the value of a variable based on the value of another variable. The variable we want to predict is called the dependent variable and the variable we are using to predict the other variable's value is called the independent variable.

Q.15. Answer-

Various Branches of Statistics are: 1) Descriptive and 2) Inferential

1) **Descriptive**- It deals with data by presenting the data either visually or numerically.

2) **Inferential**- It deals with data by making conclusions about data.