

STATISTICS WORKSHEET-1

1. Bernoulli random variables take (only) the values 1 and 0

Ans-True

2. Central Limit Theorem

3. Modeling bounded count data

4. All of the mentioned

5. Poisson

6. False

7. Hypothesis

8. 0

9. Outliers cannot conform to the regression relationship

10. Normal distribution also known as the Gaussian distribution. It is a probability distribution that is symmetric about the mean and it shows that data near the mean are more frequent in occurrence than data far from the mean.

In graph normal distribution will appear as a bell curve

11. Missing data appear when no value is available in one or more variables of an individual and due to missing data the statistical power of the analysis can be reduced which can impact the validity of the results.

There are three techniques to handle the missing data

- Deletions

- Basic imputation techniques
- K-Nearest neighbor imputation

I recommended Mean or Median imputation techniques

12. A/B testing also known as split testing, refers to a randomized experimentation process wherein two or more versions of a variable like web page are shown to different segments of website visitors at the same time to determine which version leaves the maximum impact and drive business metrics.

13. Mean imputation does not preserve the relationships among variables. True, imputing the mean preserves the mean of the observed data. If data are missing completely at random the estimate of the mean remains unbiased.

14. Linear regression analysis is used to predict the value of a variable based on the value of another variable. The variable you want to predict is called the dependent variable. The variable you are using to predict the other variable's value is called the independent variable