STATISTICS

Answer 1. a) True

Answer 2. a) Central Limit Theorem

Answer 3. b) Modeling bounded count data

Answer 4. d) All of the mentioned

Answer 5. c) Poisson

Answer 6. b) False

Answer 7. b) Hypothesis

Answer 8. a) 0

Answer 9. c) Outliers cannot conform to the regression relationship

Answer10. The Normal Distribution also called as Goussian distribution or bell curve. it is a most significant continuous probability distribution. The normal distribution defined by the Probability density function for the continuous random variable.

Answer11. Missing data can be handle with in a many way such as treating the missing values(Deletions, pairwise deletion, list wise deletions,Droping complete columns) , Basic Imputation technique, k-nearest neighbor imputation. Some imputation technique for handle the missing data is :-

Imputation using the statistics value (mean,median,mode)

imputation with a constant value

k-Nearest neighbor imputation

Answer12. A/B testing is basically statistical hypothesis testing. It is analytical method for making decisions that estimates population parameters based on sample statistics.

The population refers to all the visitors coming to your websitie , while the sample refers to the number of visitors that participated in the test.

Answer13. The mean imputation 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.

Answer14. 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.

Answer15. statistics have a following branches:-

Descriptive statistics deals with the presentation and collection of data. This is usually the first part of a statistical analysis. It is usually not as simple as it sounds, and the statistician needs to be aware of designing experiments, choosing the right focus group and avoid biases that are so easy to creep into the experiment

Descriptive statistics have two parts

Central tendency measures (mean, median,mode)

Variability measures

inferential statistics, as the name suggests, involves drawing the right conclusions from the statistical analysis that has been performed using descriptive statistics. In the end, it is the inferences that make studies important and this aspect is dealt with in inferential statistics.

Types of inferential statistics

Regression analysis

Analysis of variance

Analysis of covariance (ANCOVA)

Statistical significance (t-test)

Correlation analysis