

## Statistics MCQ's & Subjective Answered

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

a) True

2. Which of the following theorem states that the distribution of averages of iid variables, properly normalized, becomes that of a standard normal as the sample size increases?

a) Central Limit Theorem

3. Which of the following is incorrect with respect to use of Poisson distribution?

b) Modeling bounded count data

4. Point out the correct statement.

d) All of the mentioned

5. \_\_\_\_\_ random variables are used to model rates.

c) Poisson

6. Usually replacing the standard error by its estimated value does change the CLT.

b) False

7. Which of the following testing is concerned with making decisions using data?

b) Hypothesis

8. Normalized data are centered at \_\_\_\_\_ and have units equal to standard deviations of the original data.

a) 0

9. Which of the following statement is incorrect with respect to outliers?

c) Outliers cannot conform to the regression relationship

10. What do you mean by Normal distribution?

Normal distribution is a kind of distribution which has bell curve in the distribution plot and the mean, median and mode are all equal to zero. And the standard deviation is approaching zero. The data will either increase or decrease equally corresponding to the median of the curve.

11. How do you handle missing data? What imputation techniques do you recommend?

If the datatype of the datapoint is of the type 'int' or 'float' then the missing data can be handled by replacing the NAN values by mean.

If the datatype of the datapoint is of the type 'Object' then the missing data can be handled by replacing NAN values by Mode.

12. What is A/B testing?

A/B testing or Bucket testing is a type of testing which compare the two versions of a single variable by splitting up the variable in to two variants A and B and test variant A against B to check which of the variants is more effective.

13. Is mean imputation of missing data acceptable practice?

Yes it is acceptable practice

14. What is linear regression in statistics?

Linear regression is a kind of regression which plots the datapoints in such a way that we will have the best fit line plotted linearly against the datapoints so as to cover most of the datapoints.

The formula for Linear Regresion is

$Y = mx + c$  where m is the co-efficient, c is the intercept

15. What are the various branches of statistics?

Statistics is divided into descriptive statistics and inferential statistics.