

## STATISTICS ASSIGNMENT

1. a) True
2. a) Central Limit Theorem
3. c) Modeling Contingency Tables
4. b) Sums of normally distributed random variables are again normally distributed even if the variables are dependent.
5. c) Poisson
6. b) False
7. b) Hypothesis
8. a) 0
9. c) Outliers cannot conform to the regression relationship.

## WORKSHEET

### 10) Normal Distribution:

In normal distribution the mean, median and mode are almost same. And it will look like a bell shaped curve and the standard deviation is 1.

This normal distribution is comes out of the variable which must be in continuous data whereas not a categorical. We need to convert skewed data to normal distribution.

11) Usually to handle the missing data we use to find mean value for the columns and to replace with median method. We can relate the column to neighbour columns But however depends on data we need to can fix the model.

The multiple imputation technique in statistics to handle the missing data...

12) A/B testing is most important and forefront statistical tool where a data scientist implementing it nowadays. We use this testing to compare two variables and to find out which performs better. For eg we making some changes in any one variable and we don't know which is performing better, In that time we use to find which is better, so A/B testing is the advanced tool to analyse.

13) Linear regression is a supervised Machine Learning Algorithm which can be used in estimation or prediction for featured data, where in statistics one

variable considered to be independent and other as a dependent or like features and labels to find the relationship between the datas.

15) There are two branches in Statistics :

- Descriptive Statistics
- Inferential Statistics

In Descriptive Statistics, there are

Measure of Central Tendency

Measure of Dispersion

Quantiles

In Inferential Statistics, there are

Normal Distribution, Bernoulli Distribution, Binomial Distribution, Z distribution.