

## Statistics worksheet

- 1) a) True
- 2) a) Central Limit Theorem
- 3) b) Modeling bounded count data
- 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.
  
- 10) Normal Distribution is symmetric towards the mean, implying that the data near the mean is more in number in comparison to data away from the mean.
- 11) Missing data can be dealt with Data deletion or Data imputation techniques. Reduced feature models, distribution-based imputation, prediction value imputation are some of the techniques used to deal with missing data.
- 12) A/B Testing is a randomized testing method using two different variables with the help of hypothesis testing.
- 13) It is not considered as an ideal practice since it involves replacing the missing values with mean, which is sensitive to data noises like outliers.
- 14) It is a method in which a scattered diagram is used, by presenting independent variable on x and dependent variable on y axis.
- 15) Statistics can majorly be categorized into 2 branches
  - a) Descriptive – This involves Organizing, summarizing & presenting that data
  - b) Inferential – It involves drawing samples to draw certain conclusions about a given population.