## **Statistics Worksheet**

- 1. A) true
- 2. A) central limit theorem
- 3. B) Modeling bounded count data
- 4. C) square of a standard normal random variable follows what is called chi-squared distribution.
- 5. C) Poisson
- 6. B) False
- 7. B) Hypotthesis
- 8. A) 0
- 9. D) None
- 10. A Normal distribution means that the distribution has more data around the mean. The distribution decreases as you move away from the center.
- 11. Missing values are a common issue in machine learning. There are two main methods of handling missing values they are deletion and imputation. Imputation methods to handle the missing data are . Replacing missing values with estimated value
  - . Preserve the sample size
  - . Can introduce bias
- 12. A/B testing is widely used in web development, marketing. It is a common method for comparing the performance of two or more versions of a product, feature or design.
- 13. Yes imputation of missed data is acceptable.
- 14. Linear regression is used in statistics to predict the value of another variable. The variable one wants to predict is called as Dependent Variable and the variable one is using to predict another variable is called as Independent Variable.
- 15. There are two main branches in statistics namely descriptive statistics and inferential statistics.

  Descriptive statistics is involved in gathering and organizing data so that it can be analyzed and presented. Inferential statistics involves drawing conclusions or making predictions from gathered data.