## **STATISTICS WORKSHEET**

- 1. a) True
- 2. a) Central Limit Theorem
- 3. b) Modeling bounded count data
- 4. d) All of the mentioned
- 5. c) Poisson
- 6. b) False
- 7. b) Hypothesis
- 8. a) 0
- 9. c) Outliers cannot conform to the regression relationship
- 10. Normal distribution, also known as the Gaussian distribution, is a probability distribution that is symmetric about the mean, showing that data near the mean are more frequent in occurrence than data far from the mean. In graph form, normal distribution will appear as a bell curve.

- 11. Mean or median imputation.
  - i) Multivariate imputation by chained equation.
  - ii) Random Forest.
- 12. A/B testing is basically statistical hypothesis testing, or, in other words, statistical inference. It is an analytical method for making decisions that estimates population parameters based on sample statistics. ... You start the A/B testing process by making a claim (hypothesis).
- 13. True, imputing the mean preserves the mean of the observed data. So if the data are missing completely at random, the estimate of the mean remains unbiased.
- 14. In statistics, linear regression is a linear approach for modelling the relationship

between a scalar response and one or more explanatory variables.

- 15. <u>There are two main branches of</u> <u>statistics</u>.
  - a. 1.Inferential
  - b. Descriptive
  - Inferential Statistics—used to make inference and describe about the population . these stats are more useful when it's not easy or possible to examine each member of the population.
  - Descriptive statistics—use to get a brief summary of daya . you can

