STATISTICS WORKSHEET-1

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

Ans: 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?

Ans: a) Central Limit Theorem

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

Ans: a) Modeling event/time data

4. Point out the correct statement.

Ans: d) All of the mentioned

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

Ans: c) Poisson

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

Ans: b) True

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

Ans: b) Hypothesis

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

Ans: a) 0

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

Ans: c) Outliers cannot conform to the regression relationship

10. What do you understand by the term Normal Distribution?

In statistics, a normal distribution or Gaussian distribution is a type of continuous probability distribution for a real-valued random variable.

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

Deleting the Missing Values

Imputing the Missing Values

Imputing the Missing Values for Categorical Features

Imputing the Missing Values using Sci-kit Learn Library

Using “Missingness” as a Feature

12. What is A/B testing?

A/B testing is a basic randomized control experiment. It is a way to compare the two versions of a variable to find out which performs better in a controlled environment.

13. Is mean imputation of missing data acceptable practice? – Yes for numeric type.

14. What is linear regression in statistics?

Linear regression analysis is used to predict the value of a variable based on the value of another variable

15. What are the various branches of statistics?

Descriptive Statistics and Inferential Statistics