STATISTICS WORKSHEET-1

1. Bernouli random variable take only the values 1 and 0.
   Ans. 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. Central limit Theorem

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

4. Point out the correct statement.
   Ans. Sums of normally distributed random variables are again normally distributed even if the variables are dependent.

5. _____ random variables are used to model rates.
   Ans. Poisson

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

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

8. Normalized data are centered at_____and have units equal to standard deviations of the original data.
   Ans. Zero

9. Which of the following statement is incorrect with respect to outliers?
   Ans. Outliers cannot conform to the regression relationship

10. Normal Distribution—
    When data is symmetrically distributed without any skewness. And by plotting this type of data , will form a bell – shaped curve. Then it is said to be a normal distribution.

11. How do you handle missing data? What imputation techniques do you recommend?
    Ans. There are several methods to handle missing data. If data is numerical then missing values can be handled by using mean, mode ,median method. Also we can delete rows and columns with missing values.

12. A/B testing is a simple experiment in which two samples of same variable are compared.

13. Mean imputation is possible only when missing values are less in numbers. But when missing values are large in number and we impute by mean , there will be difference between standard and actual errors.

14. Linear regression is a simple technique to show the relationship between independent variable and dependent variable.

15. There are two types of statistics :-

    1. Descriptive statistics
    2. Inferential statistics