**STATISTICS WORKSHEET-1**

**Q1 to Q9 have only one correct answer.**

Choose the correct option to answer your question.

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 : b) Modeling bounded count data

4. Point out the correct statement.

a) The exponent of a normally distributed random variables follows what is called the log- normal distribution

b) Sums of normally distributed random variables are again normally distributed even if the variables are dependent

c) The square of a standard normal random variable follows what is called chi-squared

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) False

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

**Q10and Q15 are subjective answer type questions, Answer them in your own words briefly.**

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

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

12. What is A/B testing?

13. Is mean imputation of missing data acceptable practice?

14. What is linear regression in statistics? 15. What are the various branches of statistics?