## **STATISTICS ASSINGMENTS 1**

Q1. Bernoulli random variables take (only) the values 1 and 0.?
ANS :- False
Q2. 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
Q3. Which of the following is incorrect with respect to use of Poisson distribution?
ANS :- Modeling bounded count data
Q4. Point out the correct statement.?
ANS :- All of the mentioned
Q5 random variables are used to model rates.?
ANS :- Poisson
Q6. 10. Usually replacing the standard error by its estimated value does change the CLT.?
ANS :- False
Q7. 1. Which of the following testing is concerned with making decisions using data?
ANS :- Hypothesis
ANS Hypothesis
Q8. 4. Normalized data are centered at and have units equal to standard deviations of the original data ?
ANS :- 0
Q9. Which of the following statement is incorrect with respect to outliers?

ANS:- None of the mentioned

Q10. What do you understand by the term Normal Distribution?

ANS :- A normal distribution is a type of continuous probability distribution in which most data points cluster toward the middle of the range, while the rest taper off symmetrically toward either extreme.

Q11. How do you handle missing data? What imputation techniques do you recommend?

ANS :- 4 Techniques to deal with missing data in datasets . simple methods that can nullify the effects of missing values .

Q12. What is A/B testing?

ANS:- A/B testing is a type of experiment in which you split your web traffic or user base into two groups. And show two different versions of a web page, app, email, and so on, with the goal of comparing the results to fine the more successful version.

Q13. Is mean imputation of missing data acceptable practice?

ANS:- mean imputation is typically considered terrible practice since it ignores feature correlation.

Q14. What is linear regression in statistics?

ANS :- Linear Regression analysis is used to predict the value of a variable based on the value of another variable.

Q15. What are the various branches of statistics?

ANS :- There are three real branches of statistics 1. Data collection, 2. Descriptive statistics, 3. Inferential statistics.