STATISTICS WORKSHEET-1

1. A) True
2. A) Central limit Theorem
3. B) Modeling bounded count data
4. D) All of the mentioned
5. C) Poisson
6. A) True
7. B) Hypothesis
8. A) 0
9. C) Outliers cannot conform to the regression relationship
10. In probability theory and statistics, the Normal Distribution, also called the Gaussian Distribution, is the most significant continuous probability distribution. Sometimes it is also called a bell curve. A large number of random variables are either nearly or exactly represented by the normal distribution, in every physical science and economics.
11. Missing data occurs in different formats. This section explains the different types of missing data and how to identify them.
    Types of missing data
    There are three main types of missing data: (1) Missing Completely at Random (MCAR), (2) Missing at Random (MAR), and (3) Missing Not at Random (MNAR).
12. In statistical terms, A/B testing is a method of two-sample hypothesis testing. This means comparing the outcomes of two different choices (A and B) by running a controlled mini-experiment. This method is also sometimes referred to as split testing.
13. When using ML or MI missing data treatments, the missing data imputation or estimation model should include all of the variables in the theoretical model under consideration (including product terms when testing interaction effects).
14. Linear regression stands as a fundamental and widely utilized form of predictive analysis. It primarily seeks to address two critical questions: Firstly, how effectively can a set of predictor variables forecast an outcome (dependent or criterion) variable? Secondly, which specific variables emerge as significant predictors of the outcome variable, and how do their beta estimates—reflecting both magnitude and direction—affect this outcome? Linear regression employs these estimates to describe the dynamics between one dependent variable and one or more independent variables. The most straightforward regression model, featuring one dependent and one independent variable, is encapsulated by the equation y = c + b*x, where: y represents the predicted score of the dependent variable,
    c is the constant,
    b denotes the regression coefficient, and
    x is the score on the independent variable.
15. he two branches of statistics are descriptive and inferential statistics. These branches of statistics follow a particular scientific approach that makes them equally important

to every statistical student. Today, in this blog, we will discuss the branches of statistics.