Q1.   a. True

Q2.   a. Central Limit Theorem

Q3.   b. Modeling bounded count data

Q4.   d. All of the above

Q5.   c. Poisson

Q6.   b. False

Q7.   b. Hypothesis

Q8.   a. 0

Q9.   c. Outliers cannot conform to regression relationship

Q10.   1. A normal distribution is graphically represented by a bell curve.
       2. In this distribution, mean is zero and the standard deviation is 1.
       3. Graph is not skewed to any side in the curve i.e. it is symmetric.

Q11.   Ways to deal with missing data:
       1. Check with data collection source if missing data can be filled.
       2. Drop the missing values.
       3. Replacing missing values with mean, mode, etc.
       4. Leave the missing value as it is.

       Imputation technique:
       1. Replace with mean.
       2. Replace with mode.
       3. KNN

Q12.   A/B testing is basically a hypothetical testing method for making decisions
       that estimate population parameters based on sample statistics.

Q13.   No, mean imputation of missing data is not a good imputation technique as
       it ignores feature correlation.

       For example in a second-hand car dealership, old cars (2001-2012) are
       most in number and their prices are much lesser than newer cars (2012-

2022) so if there is a new car with NaN in price column then by using mean imputation we will get price of old car.

Q14. Linear regression basically tells us the relation between one dependent and one independent variable using a line.

Q15. Types of statistics:

1. Descriptive statistics : if data can be described without any statistical tools then it is called descriptive statistics . For example, marks in class, height of student.

2. Inferential statistics : We take a few samples from different data and we find the average. This is called inferential statistics.