

STATISTICS WORKSHEET-1

Ans 1 (a) True

Ans 2 (a) Central Limit Theorem

Ans 3 (b) Modeling bounded count data

Ans 4 (d) All of the mentioned

Ans 5 (c) Poisson

Ans 6 (b) False

Ans 7 (b) Hypothesis

Ans 8 (a) 0

Ans 9 (c) Outliers cannot conform to the regression relationship

Ans 10 A normal distribution refers to a probability distribution where the values of a random variable are distributed symmetrically. These values are equally distributed on the left and the right side of the central tendency. Thus, a bell-shaped curve is formed.

Ans 11 We can use either `isna()` or `isnull()` method to detect missing values in data. We can get the total of missing values in each column with `sum()` or take the average with `mean()`.

Ans 12 An A/B test, also called a controlled experiment or a randomized control trial, is a statistical method of determining which of a set of variants is the best. A/B tests allow organizations and policy-makers to make smarter, data-driven decisions that are less dependent on guesswork.

Ans 13 No, mean imputation is bad imputation. It does improve power, but your results will be so biased, the improved power won't help much. Sure, your results might be significant, but they're the wrong results!

Ans 14 Linear regression is a regression model that estimates the relationship between one independent variable and one dependent variable using a straight line. Both variables should be quantitative.

Ans 15 There are three branches of statistics: data collection, descriptive statistics and inferential statistics.