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STATISTICS WORKSHEET 1

- 1.A(TRUE)
- 2.A(CENTRAL LIMIT THEOREM)
- 3.B(MODELLING BOUNDED FOR COUNT DATA)
- 4.D(ALL OF THE MENTIONED)
- 5.C(POISSON DISTRIBUTION)
- 6.B(FALSE)
- 7.B(HYPOTHESIS)
- 8.A(0)
- 9.C(OUTLIERS CANNOT FORM THE REGRESSION RELATIONSHIP)
- 10.NORMAL DISTRIBUTION:

Is a probability distribution that is symmetric about the mean, showing that data near the mean are more frequent in occurrence than data far from mean.

Also called Gaussian distribution.

11.Missing values can be imputed using various methods and this is the part of analysis that helps you decide the correct value for replacing the null values with. kindly, note that any operation you perform in the columns/datapoints will directly affect the performance of your model. In the majority of cases replacing with MEAN (in case of continuous column) and with MODE (in the categorical variable) is a preferable choice.

12.A/B Testing: It is basically hypothesis testing and it is a method of making decisions or inferences.

It is an analytical method for making decisions that estimates population parameters based on sample statistics.

13.True, imputing the mean preserves the mean of observed data. so if the data are missing completely at random, the estimate of mean remains unbiased.

14.Linear regression : Estimates the relationship between one independent variable and the other dependent variable.

$Y = a + bx$ where y = dependent variable

x = independent variable

a = intercept

b = coefficient of independent variable.

15.The various branches of statistics are descriptive statistics and inferential statistics.