

Q.10) what do you understand by normal distribution?

Ans- normal distribution is seen to be continuous in nature. It is distributed evenly on both sides. Every event is independent from one another. In normal distribution, all mean, median, mode line up such that its centre of distribution is mean. i.e. mean = mode = median, due to this half of the result forms exactly either side. It is symmetric about its mean. In graph it will appear as a bell curve.

Q.11) how do you handle missing values? which imputation technique will you recommend?

Ans- There are various techniques to fill missing values, such as simple imputer, knn imputer, iterative imputer. It will also depend on the kind of data which method to be used. I recommend to use iterative imputation because in this method it treats other columns as features (which do not consist of null values) and trains them, other columns as labels (which consist of null values). Finally, it predicts the NaN data and imputes them.

Q.12) what is A/B testing?

Ans- A/B testing refers to an experiment process where two or more versions of a variable are compared and observed which performs better. You can show version A to your half audience and version B to the other audience and analyze which performs better. It is mostly benefited to marketing teams; these tests are valuable to business because they are low cost but high in rewards.

Q.13) Is mean imputation of missing data an acceptable practice?

Ans- It is very easy to impute as it takes the mean of the data. It can lose a large part of the sample. It may not help to find correlation even if it is related. Mean imputation leads to a standard error that is too low, so p-values will also be affected.

Q.14) What is linear regression in statistics?

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

Q.15) What are the various branches of statistics?

Ans- Two types of statistical methods are used in analyzing data:

1) descriptive data

2) inferential data

Descriptive data mostly focus on central tendency, variability, and distribution of sample data. Central

tendency means the estimate of characteristics of typical element of sample population such as mean, mode, median. variability refers to statistics that show how much difference there is among the element of sample or population along characteristics measured and includes metrics such as variance, standard deviation. Inferential stats are tools that draw the conclusion about characteristics of population and calculate probability