WORKSHEET NO.-1

STATISTICS

Ans-1) true (a)

Ans-2) central limit theorem (a)

Ans-3) modeling contingency tables (c)

Ans-4) all of the mentioned (d)

Ans-5) poisson (c)

Ans-6) false (b)

Ans-7) hypothesis (b)

Ans-8) 0 (a)

Ans-9) outliers cannot conform to the regression relationship (c)

Ans-10) Normal distribution also known as Gaussian distribution , is a probability distribution that is symmetric about the mean , showing that data near the mean are more frequent in occurence than data far from the mean. In graph form , normal distribution will appear as bell curve.

Ans-11) Generally speaking there are three main approaches to handle missing data ;

1) **Imputation-** Where the values are filled in the place of missing data.

2) **Omission**- Where the samples with invalid data are discarded from the further analysis.

3) **Analysis-** By directly applying methods unaffected by the missing values.

Ans-12) **A/B testing** is abasic randomized control experiment. It is a way to compare the two versions of avariable to find out which performs better in a controlled environment.

Ans-13) Yes , Mean imputation of missing data is acceptable practice because in a single imputation method the missing data are filled by some means and the resulting completed data set is used for inference. Mean imputation is one such method in which the mean of the observed values for each variable is computed and the missing values for that variable are imputed by this mean.

Ans-14) In statistics, linear regression is a linear approach for modelling the relationship between a scaler response and one or more explanatory variables(also known as dependent and independent variables)

Ans-15) The three real branches of statistics : data collection, descriptive statistics and iferential statistics.