Statistics Worksheet-1

1.) A
2.) A
3.) B
4.) D
5.) C
6.) B
7.) B
8.) A
9.) C

10.) It is a collection of data where more values are collected in the center if the range and the remaining values are gradually distributed on the either side of the curve respectively.

11.) Missing data is generally appeared when there is no value available in the acquired data in one or more areas. This will affect the end result after the analysis.

Steps to deal with missing data:

a.) find the reason

b.) type of data (MCAR, MAR, MNAR)

c.) Detect the missing vales

d.) Treat the data i.e. through deletion or imputation techniques (mean imputation, substitution, hot deck imputation, cold deck imputation, regression imputation, stochastic regression imputation, interpolation and extrapolation)

12.) A/B testing is a technical method which is generally used to understand how an altered variable has an impact on the user. It is generally used as a marketing strategy e.g.: web designing, product development

13.) Mean imputation is not very acceptable as it is considered as a terrible practice as it considers on the mean of the observed data, it does not maintain relationship between variables. It also does not consider few errors which will invalidate the hypothesis which will affect the end result.

14.) Linear regression is an analysis made to predict the value of a variable i.e. dependent variable based on the value of another variable i.e. independent variable. It is used to predict the future outcomes. It allows making proper decisions while decision making process for an effective outcome. It makes predictions for continuous or numerical variables such as sales, salary, age etc.

15.) Branches of statistics:

Descriptive statistics: it mainly deals with the collection and representation of the data. It is very important to choose the right mode of data collection because it will affect the outcome of analysis.

Inferential statistics: this branch involves drawing the correct conclusions of the analysis made by using the descriptive statistics. This is the most important aspect of statistics.