STATISTICS WORKSHEET

Assignment No. 04

Answer No.01:- Option(d) -> All of the mentioned

Answer No.02:- Option(a) ->Discrete

Answer No.03:- Option(a) -> pdf

Answer No.04:- Option(c) -> mean

Answer No.05:- Option(a) -> variance

Answer No.06:- Option(a) -> variance

Answer No.07:- Option(c) -> 0 and 1

Answer No.08:- Option(b) -> bootstrap

Answer No.09:- Option(b) -> summarized

Answer No.10:- Histograms are a special kind of bar graph that shows a bar for a range of data values instead of a single value.

A box plot is a data display that draws a box over a number line to show the interquartile range of the data.

Answer No.11:- For selecting a metrics in statistics -

1. Define your primary objective
2. Choose your metrics(determine cause and effect)
3. Create relevant activities
4. Evaluate Periodically

Answer No.12:- To assess statistical significance,you would use hypothesis testing.The null hypothesis and alternate hypothesis would be stated first.Second,you'd calculate the p-value,which is the likelihood of getting the test's observed findings if the null hypothesis is true.Finally,you would select the threshold of significance and reject the null hypothesis if the p-value is smaller than the alpha in other words,the result is statistically significant.

Answer No.13:- Any type of categorical data won't have a Gaussian distribution or log normal distribution.

Exponential distributions – eg. The amount of time that a car battery lasts or the amount of time until an earthquake occurs.

Answer No.14:- Income is the classic example of when to use the median instead of the mean because its distribution tends to be skewed.

Answer No.15:- Likelihood function is a fundamental concept in statistical inference.It indicates how likely a particular population is to produce an observed sample.