STATISTICS WORKSHEET-9

Q1 to Q12 have only one correct answer. Choose the correct option to answer your question

Answers:-

1) C
2) B
3) B
4) B
5) C
6) A
7) C
8) B
9) C
10) C
11) A
12) B

Q13 to Q15 are subjective answers type questions, Answers them in their own words briefly.

Q13) Difference between Z Distribution and T Distribution The Z distribution is a special case of the normal distribution with a mean of 0 and standard deviation of 1. The t-distribution is similar to the Z-distribution, but is sensitive to sample size and is used for small or moderate **samples when the population standard devi**ation is unknown.

Q14) The t-distribution, also known as Student's t-distribution, is a way of describing data that follow a bell curve when plotted on a graph, with the greatest number of observations close to the mean and fewer observations in the tails.

It is a type of normal distribution used for smaller sample sizes, where the variance in the data is unknown.

15) The t-distribution is a type of normal distribution that is used for smaller sample sizes. Normally-distributed data form a bell shape when plotted on a graph, with more observations near the mean and fewer observations in the tails.

The t-distribution is used when data are approximately normally distributed, which means the data follow a bell shape but the population variance is unknown. The variance in a t-distribution is estimated based on the degrees of freedom of the data set (total number of observations minus 1).

It is a more conservative form of the standard normal distribution, also known as the z-distribution. This means that it gives a lower probability to the center and a higher probability to the tails than the standard normal distribution.