BT2022 | FEB-MAY 2021 | QUIZ I } 20 marks

Consider the given sample data set with sample size = 100 drawn from an arbitrary non-normal population. This is the original sample dataset.

Calculate the Pearson classification factor using skewness and kurtosis (4 marks).

Using the idea of Central Limit Theorem, generate a sub sample dataset of size 100. Here each sub-sample value is computed by drawing randomly 10 numbers (indices are as given in the appendix file) from the original sample.

Then using this sub sample at alpha = 0.01,

Compute the probable range of the population mean of the original sample (4 + 4 marks).

Compute the probable range of the population variance of the original sample (4 + 4 marks).

Using the Student's Theorem.

Note: all the index counting start from 0 to 99.