National University of Computer & Emerging Sciences Peshawar

<u>Probability & Statistics</u> <u>Assignment No. 1</u> <u>Deadline: October 14; 2019</u>

Question 1: Total points: 100

Take any TWO sets of data containing at least 100 observations each (Need to take real data taken from some source with reference of that source) and compute the following using MS Excel:

Measure of central tendency

- 1. Arithmetic Mean
- 2. Geometric Mean
- 3. Harmonic Mean
- 4. Median
- 5. Quintiles (Quartiles, D_7 , P_{10} , P_{90})
- 6. Mode

Measure of dispersion

- 7. Range
- 8. Inter Quartile Range (IQR)
- 9. Quartile Deviation (QD)
- 10.Mean Deviation (MD)
- 11.Standard Deviation and Variance
- 12. Coefficient of variation and its interpretation
- 13. Karl Pearson Coefficient of Skewness
- 14. Bowley's Coefficient of Skewness
- 15. Percentile coefficient of Kurtosis

After finding all the these quantities you need to conclude something regarding data sets.

Note: You can work in MS Excel but use of built in routines of MS Excel for the above mentioned tasks are not allowed. After completion of the tasks you need to submit you excel file.