# PATAN MULTIPLE CAMPUS

Practical – 1: Descriptive Statistics

Roll No.: 23                                                      Date: 2081-05-30
Program: BIT                                                  Semester: 2nd
Subject: Basic Statistics                                  Section: A

**Question**: Find no. of observation, minimum value, maximum value, mean, median, quartiles, range, interquartile range, quartile deviation, coefficient of variation, skewness, kurtosis and outlier value of the following observations: 25, 3, 15, 20, 19, 20, 16, 15, 10, 10, 15, 25, 20, 16, 16, 15, 10, 8.

## Working Expressions:

**Calculation**:

### i. Data

25, 3, 15, 20, 19, 20, 16, 15, 10, 10, 15, 25, 20, 16, 16, 15, 10, 8

### ii. Syntax

FREQUENCIES VARIABLES=x

 /NTILES=4

 /STATISTICS=STDDEV VARIANCE RANGE MINIMUM MAXIMUM MEAN
MEDIAN SKEWNESS SESKEW KURTOSIS SEKURT

 /ORDER=ANALYSIS.

### iii. Output

x

| N | Valid | 18 |
|---|---|---|
| | Missing | 0 |
| Mean | | 15.33 |
| Median | | 15.50 |
| Std. Deviation | | 5.552 |
| Variance | | 30.824 |
| Skewness | | -.393 |
| Std. Error of Skewness | | .536 |
| Kurtosis | | .115 |
| Std. Error of Kurtosis | | 1.038 |
| Range | | 22 |
| Minimum | | 3 |
| Maximum | | 25 |
| Percentiles | 25 | 10.00 |
| | 50 | 15.50 |
| | 75 | 20.00 |