

## PATAN MULTIPLE CAMPUS

### Practical – 3 Descriptive Statistics

Roll No.: 23  
Program: BIT  
Subject: Basic Statistics

Date: 2081-05-30  
Semester: 2<sup>nd</sup>  
Section: A

**Question:** Find (a) no. of observation, minimum value, maximum value, mean, median, mode, and range. (b) Find quartile, quartile deviation, inter-quartile range, standard deviation, variance, and coefficients of variation.

61	55	18	90	32	27	85	26	75
62	3	7	81	20	42	68	36	10

**Working Expressions:**

## Calculation:

### i. Data

61	55	18	90	32	27	85	26	75
62	3	7	81	20	42	68	36	10

### ii. Syntax

- a. DATASET ACTIVATE DataSet0.  
FREQUENCIES VARIABLES=x y  
/STATISTICS=RANGE MINIMUM MAXIMUM MEAN MEDIAN MODE  
/ORDER=ANALYSIS.
- b. FREQUENCIES VARIABLES=x y  
/NTILES=4  
/STATISTICS=STDDEV VARIANCE SKEWNESS SESKEW KURTOSIS  
SEKURT  
/ORDER=ANALYSIS.

### iii. Output

#### a.

		x	y
N	Valid	9	9
	Missing	0	0
Mean		52.11	36.56
Median		55.00	36.00
Mode		18 <sup>a</sup>	3 <sup>a</sup>
Range		72	78
Minimum		18	3
Maximum		90	81

a. Multiple modes exist. The smallest value is shown

#### b.

		x	y
N	Valid	9	9
	Missing	0	0
Std. Deviation		27.406	28.767
Variance		751.111	827.528
Skewness		.166	.328
Std. Error of Skewness		.717	.717
Kurtosis		-1.774	-1.480
Std. Error of Kurtosis		1.400	1.400
Percentiles	25	26.50	8.50
	50	55.00	36.00
	75	80.00	65.00