

## Lab 1

### Unit 2: Descriptive Statistics

1. Compute mean, median, mode, range, coefficient of range, Interquartile range, Quartile deviation, coefficient of QD, mean deviation, standard deviation, coefficient of SD, CV and variance of the following data

a.

43	37	50	51	58	105	52	45	45	10	43	43
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b.

values	20	30	40	50	60	70
frequency	8	12	20	10	6	4

c.

Class interval	0-10	10-20	20-30	30-40	40-50	50-60
frequency	5	10	25	30	20	10

2. Compute CV and test the consistency of data

Series A	23	30	18	25	32	40
Series B	20	35	44	27	41	38

3. Calculate Karl Pearson's coefficient of skewness, Bowley's coefficient skewness and Percentile coefficient of Kurtosis and interpret the result.

Class interval	10-20	20-30	30-40	40-50	50-60
Frequency	5	18	35	20	12

4. Compute first four moments about an arbitrary point 75 from the following data. Also find first four central moments, skewness and kurtosis and interpret

Class interval	50-60	60-70	70-80	80-90	90-100
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Frequency	5	12	20	7	6
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5. Calculate the appropriate measures of central tendency, dispersion and skewness of the following data

Class interval	Below 10	10-15	16-19	20-24	25-29	Above 29
Frequency	9	20	35	40	24	12

6. Compute five number summaries and construct Box -Whisker plot. Also describe the shape

10	50	70	80	90	55	65	70	85	90	15	40	35	25	20	5	75	45
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