

1) scatter diagram?

Sol: scatter diagram is a way to plot the dots in cartesian (x,y) plane.

2) Measures of dispersion?

Sol: It includes;

1) Range

2) IQR

3) Variance

4) SD

3) Standard deviation?

Sol: S.D is represented in terms of variance;

$$S.D = \sqrt{\text{var}}$$

4) Measures of central tendency?

Sol: It includes:-

1) mean

2) mode

3) ~~xxx~~ median

5.) correlation?

Sol:- It measures the strength & direction of the relⁿ b/w two variables. It represents with "r".

6.) diff b/w linear & non-linear?

Sol:- Linear:-

diff b/w linear & non-linear variables follows a straight line.

$$y = a + bx$$

non-linear:- The relⁿ is curved (or) more complex requiring polynomial logarithmic methods.

7.) Properties of normal dist?

Sol:-

- 1) total area under the curve = 1
- 2) mean, median & mode are equal
- 3) symmetrical & bell-shaped curve.

8.) Applications of normal dist?

Sol:-

- 1) IQ & standardized test scores analysis.

- 2) statistical hypothesis testing.

- 3) Financial market risk assessment.

1) Spearman rank correlation?

Sol:- It is represented in " r_s "

$$r_s = 1 - \frac{6 \sum d^2}{n(n^2 - 1)}$$

d = diff b/w ranks

2) Diff b/w Quantitative & Qualitative methods?

Sol:- Quantitative :- Numerical, statistical analysis.
= =

Qualitative :- Descriptive, interpretative.
= =