

stages. In other words, having more theoretical plates increases the efficacy of the separation process be it either a distillation, absorption, chromatographic, adsorption or similar process.

**1.6.13 Symmetry (tailing factor)**

This is a system suitability parameter and it is a measure of peak symmetry; its value increases as tailing becomes more pronounced and it is computed by the formula:

$$T = \frac{W_{0.05}}{2f} \dots\dots\dots \text{Eq (3)}.$$

Where:

$W_{0.05}$ : Peak width at 5% height.

$f$ : distance from the peak maximum to the leading edge of the peak, the distance being measured at a point 5% of the peak height from the base line.

**1.6.14 Relative standard deviation**

A statistical parameter used to verify the closeness between the test result and it is expressed by the following equation:

$$s = \sqrt{\frac{\sum_{i=1}^N (x_i - \bar{x})^2}{N - 1}} \dots\dots\dots \text{Eq (4)}.$$

$$RSD (\%) = \left( \frac{SD}{\bar{X}} \right) \times 100 \% \dots\dots\dots \text{Eq (5)}.$$

Where:

S= Standard deviation.

RSD (%) = Relative standard deviation.

$\bar{X}$  = Average of set of N measurements.