SHORT NOTES ON: ACCURACY, LINEARITY, THRESHOLD, DRIFT &STABILITY

(i) Accuracy:

It is the degree of closeness with which the reading approaches the true value of the quantity to be measured.

(ii) Linearity:

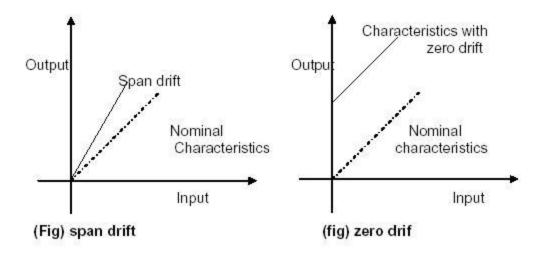
The linearity is defined as the ability to reproduce the input characteristics symmetrically & linearly. The curve shows the actual calibration curve & idealized straight line.

(iv) Threshold:

If the instrument input is increased very gradually from zero there will be some minimum value below which no output change can be detected. This minimum value defines the threshold of the instrument.

(v) Zero drift:

If the whole calibration gradually shifts due to slippage, permanent set, or due to undue warming up of electronic tube circuits, zero drift sets in.



b) span drift or sensitivity drift

If there is proportional change in the indication all along the upward scale, the drifts is called span drift or sensitivity drift.

c) Zonal drift:

In case the drift occurs only a portion of span of an instrument, it is called zonal drift.

(vi) Stability:

It is the ability of an instrument to retain its performance throughout is specified operating life.

Source: http://mediatoget.blogspot.in/2012/02/short-notes-on-accuracylinearityprecisi.html