19.3 F test is defined as the ratio of variances of given two set of values.
Calculate standard deviation and variance will be square of std deviation

$$SD = \sqrt{\frac{\Sigma (X - \bar{X})^2}{n-1}}$$

First set $\bar{X}$ For (10, 20, 30, 40, 50) $= \frac{10+20+30+40+50}{5} = 30$

$$SD = \sqrt{\frac{(10-30)^2 + (20-30)^2 + (30-30)^2 + (40-30)^2 + (50-30)^2}{5-1}}$$

$= 15.8114$

Variance $= (SD)^2 = 250$

Second set $\bar{X}$ For (5, 10, 15, 20, 25) $= \frac{5+10+15+20+25}{5} = 15$

$$SD = \sqrt{\frac{(15-15)^2 + (10-15)^2 + (15-15)^2 + (20-15)^2 + (25-15)^2}{5-1}} = 7.9057$$

Variance $= (SD)^2 = 62.5$

$$F\text{-Test} = \frac{\text{Variance of First set}}{\text{Variance of second set}} = \frac{250}{62.5} = 4$$

F Test value = 4