Question : Calculate F Test for given 10, 20, 30, 40, 50 and 5,10,15, 20, 25.

For 10, 20, 30, 40, 50:

Answer : **F test is known as ratio of variance of set of values.**

**Set 1 : 10, 20, 30, 40, 50**

**Mean of Set 1 = (10+20+30+40+50)/5= 30**

**Variance of Set 1 =((10-30)^2+(20-30)^2+(30-30)^2+(40-30)^2+(50-30)^2)/5-1 = 250.25**

**Set 2 : 5,10,15, 20, 25**

**Mean of Set 2 = (5+10+15+20+25)/5= 15**

**Variance of Set 2 =((5-15)^2+(10-15)^2+(15-15)^2+(20-15)^2+(25-15)^2)/5-1 = 62.75**

**F Test for 10, 20, 30, 40, 50 = Variance of Set 1/ Variance of Set 2 = 250.25/62.75 = 3.988**