Anova (F Test)

What is mean by Anova ?-

we analysis of variance frequently refere to by the Contrance Anova; is a statistical tequince specially designed to determine wheather it means of more then two Contrative Population are equal.

What are the basic assumption of Anova ?

* normalaty
* The Group of are homogenous in variability
* Independies of errors
* ~~What an~~

What are the Classifiatcion (or) claint (or) types (or) method (or) Techiques of Anova ?

The Tequnices of analysis of variance has been Classified in to two types. They are ~~one way~~

* One way classification Anova model.
* Two way classification Anova model.

One way Classification model :-

Step : 1 Code the Data by Stratase the Common elements.

Steps : 2 Calculated a Correction factor = $\frac{T^2}{N}$

Steps : 3 Calculated the total for each Coloumn.

Steps : 4 Calculated the square value of each observation and aptain the Coloum wise Total.

Steps :5

Calculated the Total Sum of Square by applying the formula $\Sigma x_1^2 + \Sigma x_2^2 + \Sigma x_3^2 \cdots - \frac{t^2}{N}$ Apply

Steps :6

Calculated the Sum of Square between the samples by applying the formula.

$$\left(\frac{\Sigma x_1^2}{N}\right) + \left(\frac{\Sigma x_2^2}{N}\right) + \left(\frac{\Sigma x_3^2}{N}\right) \cdots - \frac{t^2}{N}$$

Steps :7

Calculated Sum of Square with in the sample :-

= (Total Sum of Square) - (Sum of Square between Sample)

Steps :8

Prepare the following ANOVA Table.

Source of ANOVA	Sum of squares	Degree of freedom	mean square	mean Square	F value
Between Sample	SSC	$V_1 = C-1$	$MSC = \frac{SSC}{C+1}$		$F = \frac{MSC}{MSE}$
with in Sample	SSE	$V_2 = n-c$	$MSE \frac{SSE}{n-c}$		
Total.	SST	$n-1$			

MSC = mean Square Between Column (or) Sample.

SSC = Sum of Square Between Column

SST = Total Sum of squares (or) Variance.

SCE = Sum of Squares.

MSE = mean Sum of Square with in Sample.