Selection of Hypothesis or Statistical Tests -

1. **Non- Parametric Test -** Used when data is not normally distributed or distribution-free.

Non-parametric Test	Purpose
Wilcoxon Sign Test	Used to compare 2 paired samples
Friedman Test	used to compare more than 2 paired samples
Mann - Whitney Test	used to compare 2 independent samples
Kruskal-Wallis test	used to compare more than 2 independent samples
Chi- sq Test	• Used to check dependency of variables • variable should be categorical

2. **Parametric test** -

- Data is normally distributed.
- Involves population parameters(like mean, median, mode)

Parametric test	Purpose
One-Sample Test	Compares sample mean with population mean
Two-sample Test	Compares mean of 2 paired samples
Two-sample separate t-test	Compares mean of 2 independent samples
One- sample F-Test (One - way anova)	Used when dependent variable is continuous and independent variable is categori
Two- Sample F-Test (2- way anova)	Used when dependent variable is continuous and independent variable is categori are 2 independent variables. (anova- analysis of variation)