

## Glossary:

**Analysis of Variance:** breaking down of total variation into orthogonal components

**Two way analysis of variance-** Two Way Analysis of Variance is a way of studying the effects of two factors separately

**Treatment:** A combination of the levels of the factors.

**Blocks:** grouping the experimental units of similar nature

**Response Variable** - dependent variable

**Fixed effects** – levels of the factor are fixed

**Factors:** Factors are the independent variable

**ANOVA** - a statistical method for making simultaneous comparisons between two or more means;

**degrees of freedom**"- number of independent values in the final calculation of a statistic

**null hypothesis** : is a term that often use to indicate the statistical hypothesis tested

**SST-** Total Sum of Square-Total variability in the data

**SSE-**Error sum of square=a sum of squares of the differences of the observations within treatments averages

**SSTR** – Treatment sum of squares-sum of squares of the differences between the treatment averages and the grand average

**SSB** - Treatment sum of squares- sum of squares of the differences between the block averages and the grand average

**Critical difference-** Pairwise comparison test when the test for comparing the equality of treatments or block means is rejected hypothesis is rejected