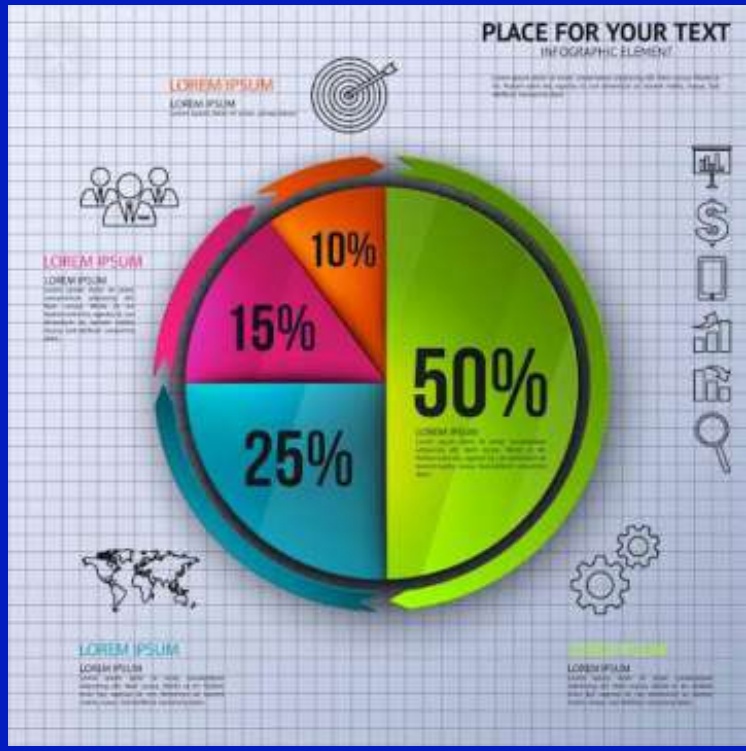
# TRINITY COLLEGE FOR WOMEN NAMAKKAL

## Department of Mathematics

## Advanced Business Statistics

## 19PCM07-Evevn Semester

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# Testing of Hypothesis

- Hypothesis testing is an act in statistics whereby an analyst tests an assumption regarding a population parameter.

- The methodology employed by the analyst depends on the nature of the data used and the reason for the analysis.

# Parametric Test

- Parametric tests are those that make assumptions about the parameters of the population distribution from which the sample is drawn.
- This is often the assumption that the population data are normally distributed.
- Non-parametric tests are “distribution-free” and, as such, can be used for non-Noemal variables

# F-Tests

- An F-test is any statistical test in which the test statistic has an F-distribution under the null hypothesis.

- It is most often used when comparing statistical models that have been fitted to a data set, in order to identify the model that best fits the population from which the data were sampled.

# One - way

- The purpose of a one-way ANOVA test is to determine the existence of a statistically significant difference among several group means.

- The test actually uses variances to help determine if the means are equal or not.

# Two -way

- A two-way ANOVA test is a statistical test used to determine the effect of two nominal predictor variables on a continuous outcome variable.

- A two-way ANOVA tests the effect of two independent variables on a dependent variable.

# X2 tests &Goodness of fit

- In Chi-Square goodness of fit test, the term goodness of fit is used to compare the observed sample distribution with the expected probability distribution.

- Chi-Square goodness of fit test determines how well theoretical distribution (such as normal, binomial, or Poisson) fits the empirical distribution.

# Yates correction

- Yate's correction, also known as Yate's chi-squared test, is used to test independence of events in a cross table i.e. a table showing frequency distribution of variables.

- It is used to test if a number of observations belonging to different categories validate a null hypothesis.

# Uses of X2 Test

- χ2 can be used to test whether two variables are related or independent from one another.

- It can also be used to test the goodness-of-fit between an observed distribution and a theoretical distribution of frequencies.

# THANK YOU

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