

RESEARCH METHODOLOGY

Credit: 4

Class Hrs: 40

Module I: Introduction to RM:

Meaning and significance of research. Importance of scientific research in decision making. Types of research and research process. Identification of research problem and formulation of hypothesis. Research Designs.

Module II: Measurement and Data Collection.

Primary data, Secondary data, Design of questionnaire ; Sampling fundamentals and sample designs. Measurement and Scaling Techniques, Data Processing.

Module III: Data Analysis – I:

Hypothesis testing; Z-test, t-test, F-test, Chi-square test. Analysis of variance. Non-parametric Test – Sign Test, Run test, Krushall – Wallis test

Module IV: Data Analysis – II:

Factor analysis, Multiple Regressions Analysis. Discriminant Analysis,

Use of SPS Package

IPR issues

Report Writing and Presentation: Research Report, Types and significance, Structure of research report, Ethical issues in research, Presentation of report.

Practical Aspect : Students are expected to use the trial version of relevant software package to learn the following :-

- (I) Draw frequencies, bar charts, histogram.
- (ii) Creating and editing graphs and charts.
- (iii) Bi-variate correlation.
- (iv) The t-test procedure.
- (v) Non-parametric Tests : Chi-square Test.
- (vi) One way ANOVA Procedure.
- (vii) Simple Regression, Multiple Regression, Reliability Analysis, Factor Analysis.

Reference Books

1. Research Methodology, Chawla and Sondhi, Vikas
2. Research Methodology, Paneersevam, PHI