MGN909:WORKSHOP ON STATISTICAL ANALYSIS

L:0 T:0 P:3 Credits:2

Course Outcomes: Through this course students should be able to

CO1 :: devise ability to create, edit and manage data sets using SPSS windows

CO2 :: develop ability to create data visualisation using appropriate graphs and charts.

CO3 :: practice effective use of cross tabulation, frequency distribution to gain insights from data

CO4 :: develop skills to use hypotheses testing procedure as per the data type/research question.

CO5 :: compute and interpret data using parametric and non parametric tests to draw the inference

List of Practicals / Experiments:

Creating and managing data with SPSS

- SPSS windows processes
- creating data file
- editing a data file
- managing data

Creating graphs and charts

- creating and editing graphs
- creating and editing charts

Frequencies and descriptive statistics

- frequencies
- bar charts
- histograms
- percentiles
- measures of central tendency

Cross tabulation and means procedure

- computing cross tabulation
- computing means

Bivariate correlation

- bivariate correlation and matrix

Testing of hypothesis

- one sample hypothesis tests
- two sample hypothesis tests
- linear regression

Multivariate analysis

- one way ANOVA
- two way ANOVA
- multiple regression
- factor analysis

Non-parametric procedures

- Chi Square test (Test of Independence)
- Mann Whitney U-test
- Wilcoxon Sign rank test
- Kruskal-Wallis h-test
- Spearman's rank order-correlation

Text Books:

1. DOING DATA ANALYSIS WITH SPSS by ROBERT H. CARVER AND JANE GRADWOHL NASH, CENGAGE LEARNING
2. DATA ANALYSIS USING SPSS by LOKESH JASRAI, SAGE PUBLICATIONS

References:

1. SPSS FOR WINDOWS STEP BY STEP by DARREN GEORGE AND PAUL MALLERY, PEARSON