M2ECO01-Skill- 01

MA ECONOMICS SEMESTER II SKILL COURSE PAPER-01 BASIC ECONOMIC ANALYSIS WITH SPSS

Course Outcome:

- **CO1:** A Student of Economics must have knowledge of data analysis through software. This course aims at giving the exposure of data analysis package SPSS and make students familiar with its applications.
- **CO2:** This paper aims to skill them in analysing the data with the help of SPSS by providing hands on experience.

UNIT I

Introduction to SPSS

Starting SPSS, SPSS main menus, Working with the data editor -General description, functions, menus, commands, SPSS file management.

Input and data cleaning - Defining variables, Manual input of data, Automated input of data and file import.

Data manipulation - Data Transformation, Syntax files and scripts, Output management. Theoretical Framework: Types of Variables - Qualitative Vs. Quantitative Variables, Nominal, Ordinal, Interval and Ratio Scale Data. Hypothesis Testing, Type I and Type II Errors, Significance Level, One Tailed and Two Tailed Tests.

UNIT-II

Descriptive Statistics

Basic Concepts - Measures of Central Tendency, Measures of Variability, Percentiles, Quartiles and Interquartile Range, Skewness, Kurtosis.

Using SPSS Descriptive Statistics- Frequencies, Descriptives, Explore, Crosstabs.

UNIT-III

Data Presentation

Different Types of Charts- Histogram, Bar Charts, Pie, Cluster and Stacked Bar, Line Charts. Use of SPSS in making Charts: Chart Builder, Constructing and editing Charts.

UNIT-IV

Correlation

Correlation Coefficient, Pearson Correlation, Spearman Correlation, Kendall Tau B, Scatter Plots, Partial Correlation.

UNIT-V

Chi - Square Test

Basic Concepts – Chi-Square test of Independence and goodness of fit, Contingency Tables. using SPSS Test of Independence, 2x2 Cross tabulation, Layered cross tab, Goodness of fit.

Basic Readings:

- Gaur A. S. & Gaur S. S (2009). Statistical Methods for Practice and Research: A guide to data analysis using SPSS, Sage Response, Second edition.
- ➢ IBM SPSS Training Manual
- Parameswaranm R. (2010).Computer Applications in Business, S. Chand and Company, New Delhi.
- Sudalaimuthu, S. & Anthony R. S. (2008), Computer Applications in Business, Himalays Publishing House, New Delhi.