SYLLABUS

UNIT I

Elementary Idea of Sets and Functions : Simple and Partial Derivatives, Differentiation of Simple functions – Polynomial (x) and Exponential functions. Maxima and Minima of functions of on variable only. Their Applications of Micro and Macro Economics.

UNIT II

Matrices : Definition and Types, Operations (Sum, Difference, Product and Transpose), Adjoint an Inverse of a matrix (upto 3.3), Solution of Equations (upto 3) by Matrix Methods and Crammer's rule

Measures of Central Tendency : Mean, Median, Partition Values, Mode, Measures of Dispersio Skewness.

UNIT III

Correlation Analysis—Karl Pearson's (except grouped data) and Spearman's formula, Simpl Regression Analysis.

Interpolation – Binomial, Expansion, Newton's (Advancing Difference Method) and Lagrange Method.

UNIT IV

Index Numbers: Concepts, Problems and Importance, Simple Index Number, Lespeyre's and Fisher Index Numbers only (among weighted index numbers), Reversibility Tests.

Time Series Analysis : Components of Time Series, Determination of Trend, Least Square an Moving Average Method.