

ELECTIVE COURSE II – ECONOMETRICS

Module – 1 : Introduction

Econometrics – definition – objectives, characteristics and scope of Econometrics – Limitations – Tools and methods of study-economic and econometric models – Time series and cross section models.

Module - 2 : Statistical Inferences

Properties of estimators – methods of estimation-least squares estimation – Maximum likelihood estimation – Testing of Hypothesis.

Module - 3 : Single Equation Models

Simple Regression-least squares estimation-standard error-Hypothesis testing – confidence interval – two variable non-linear relationship – multiple regression – Gauss Markov Theorem – Testing of Hypothesis and Confidence intervals - problems.

Module - 4 : Problems in OLS Estimation

Autocorrelation – multi co linearity – heteroscedasticity – specification problem and bias – errors in variables – dummy variables – lag models – problems.

Module - 5 : Simultaneous Equations

Simultaneous equation model – reduced form – final form – methods of identification – estimation: Indirect least squares method – two stage least squares estimation – maximum likelihood estimation.

References:

1. Damodar Gujarati, Basic Econometrics, McGraw Hill, New Delhi, 1984.
2. Singh, S.P., Parashar, K and Singh, H.P., Econometrics, S.Chand & Co, New Delhi, 1981.
3. William H. Greene, Econometric Analysis, Prentice Hall, New Hersey, 1993.
4. Koutsyiannis, A (1989), Theory of Econometrics, Macmillan, New Delhi.
5. Salvatore, Dominick, Statistics and Econometrics, Schaum Series.