

**Department of Higher Education, Govt. of M.P.**  
**Semester wise Syllabus for post graduation**  
As recommended by Central Board of Studies and  
approved by HE the Governor of M.P.

**M.A. Economics**

**MM – 50**

**Semester – III**  
**Set – A**  
**Paper - IV**  
**ECONOMETRICS –I**

Objective: Econometrics is a tool to judge the role of economic variables in the economic development.

Unit - 1 Statistical Inference: Random Variable, Expectation of Random Variable, Sampling distribution and Standard Error, Testing of Hypothesis, Level of Significance and confidence limit, Hypothesis Testing for Mean, difference between means, Proportions and difference between proportions. Small Sample and Large Sample Test, F- Test, Estimation and Properties of Good Estimates.

Unit – 2 Meaning and Methodology of Econometrics-Nature and Scope Econometrics. The Nature of Regression Analysis and Basics of Two-Variable Regression Analysis. Estimation and Hypothesis Testing..Extensions of the Two-variable Linear Regression Model. Multiple Regression Model, Estimation and Inference.

Unit – 3 .Nature, Consequences, Detection and Remedial Measures of Multi Collinearity, Heteroscedasticity and Autocorrelation.

Unit – 4 .Regression on Dummy Variable, Dynamic Econometrics Models: Autoregressive and Distributed Lag Models.

Unit – 5 .Systems of Equations, Identification and Estimation Methods (ILS and 2SLS), Business Applications of Single Equation Econometrics Model and Systems of Equations. ,  
Books Recommended:

1. Koutsoyiannis A -Theory of Econometrics E L B S/Macmilian
2. Schmidt P. Econometrics, Marcel Dekker, N.Y.
3. Maddala, G.S., Econometrics Mc Graw Hill
4. Rao & Miller, Applied Econometrics Prentice-Hall ',Gujrati Basic Econometrics ;: ..