Semester	VII
Paper Code	**C4EC230732**
Paper Title	**Quantitative Economic Analysis-II: Econometrics**
No. of Credits	6
Theory/Practical/Composite	Composite
No. of periods assigned	3 Theory 1 Practical
Minimum No. of preparatory hours per week a student has to devote	4 Theory 2 Practical
Course description/objective	The objective is to 1. Understand the consequences of violation of classical assumptions. 2. Test for and estimate linear regressions under heteroscedasticity 3. Test for and estimate linear regressions under serial correlation 4. Develop tools for analyzing time series data in economics. 5. Introduce students to simultaneous equation models. 6. Use computers to analyze time series and cross sectional data.
Syllabus	**Module 1 (20 marks)** Violation of Classical Assumptions – Heteroscedasticity, Autocorrelation Logit and Probit models **(No. of classes per week: 1)** **Module 2: Time Series Analysis (20 marks)** Autocorrelation - ACF and PACF - Some Useful Processes (White Noise, Random Walks, MA Processes, AR Processes, ARMA Processes and ARIMA Processes) –Unit root and structural break. **(No. of classes per week: 1)** **Module3**: **Introduction to Simultaneous Equations System (10 marks)** Specification, Identification, single equation estimation in simple economic models **(No. of classes per week: 1)** **Practical (20 marks)** **(No. of classes per week: 1)**
Readings	1. Maddala, G.S: Introduction to Econometrics, 3rd Edition, John Wiley and sons. 2. Johnston and Dinardo: Econometric Methods,4th Edition, The McGraw Hill Companies Inc. 3. James H Stock and Mark W. Watson: Introduction to Econometrics, Pearson Education. 4. Jeffrey M. Wooldridge: Introductory Econometrics – A Modern Approach, 5th Edition, South-Western Cengage Learning 5. G. C. Chow: Econometrics (1984) 6. Kmenta, J.: Elements of Econometrics

Evaluation	Continuous Internal Assessment: 30 marks End- Semester Theory Examination: 70 marks

Paper Structure for End Semester

Module	No. of Questions to be Answered	No. of Alternatives	Marks
Module 1	2	3	10 x 2 = 20
Module 2	2	3	10 x 2 = 20
Module 3	1	2	10 x 1 = 10
Total Marks (Theory)			50
Total Marks (Practical)			20
Total Marks			70