# 2013

# M.A/M.Sc.

### 3rd Semester Examination

#### **ECONOMICS**

PAPER-ECO-302E

Full Marks: 40

Time: 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Special Paper: Econometrics

# Group-A

Answer any five of questions:

 $2 \times 5$ 

- 1. (a) Define an AR(2) [Autoregressive of order two] process.
  - (b) Define strong exogecity of a variable in bivariate time series.

- (c) Define a white noise series. Where is it used?
- (d) Define spurians correlation.
- (e) Define stationarity of series.
- (f) Why does lag arise in an Econometric model?
- (g) Distinguish between micro panel and macro panel.
- (h) Distinguish between REM and FEM.
- (i) State the theorem of orthogonally partitioned regression.
- (j) State the properties of residual maker matrix (M).

## Group-B

Answer any two questions:

5×2

- 2. What do you mean by unit root test? Why do you carry one this test? Explain.
- 3. Set up a dummy variable model to have a Kink in between two liners growth paths in a time series.
- 4. Briefly explain the advantages of panel data analysis.
- 5. Write a short-note on Wo-Hausman Test.

## Group-C

Answer any two questions:

10×2

- 6. Define the concept of cointegration between two time series. How is the cointegration between two series determined? What is the relevance of the existence of cointegration?
- 7. Compare and contrast the Adaptive Expectation model and the L. M. Koyck model in the distributed lagged structure.

- 8. Estimate the parameters of FEM by LSDV.
- 9. Prove that OLS estimator of the slope parameter in Panel Data analysis is the weighted sum of within-group and between-group estimators.