

**M.Sc. 3rd Semester Examination, 2012**

**ECONOMICS**

**PAPER – X (ECO-302 E)**

*Full Marks : 40*

*Time : 2 hours*

*The figures in the right-hand margin indicate marks*

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

*Illustrate the answers wherever necessary*

**( Special Paper : Econometrics-II )**

**GROUP – A**

- 1. Answer any five of the following : 2 × 5**
- (a) Distinguish between micropanel and macropanel.**
  - (b) What do you mean by idiosyncratic error term ?**
  - (c) Distinguish between Fixed Effect Model and Random Effect Model.**

- (d) State the important properties of residual maker matrix (M).
- (e) Define balanced panel with example.
- (f) What do you mean by two way classification of unobserved effect ?
- (g) State and explain the assumptions of L. M. Koyck model.
- (h) Explain in brief the basic problems that arise in the estimation of distributed lag models.
- (i) Define a random walk series with a drift. Is it stationary ?
- (j) What do you mean by autoregression in a time series ?

**GROUP – B**

Answer any *two* of the following :

5 × 2

- 2. Explain Hausman specification test for Random Effect Model.
- 3. Briefly explain the advantages and disadvantages of the panel data.

4. Define different types of exogeneity in the context of a bivariate time series.
5. Distinguish between Trend Stationary Process (TSP) and Difference Stationary Process (DSP).

**GROUP – C**

Answer any *two* of the following : 10 × 2

6. What do you mean by Least Square Dummy Variable Method (LSDVM)? Estimate the parameters of Fixed Effect Model by LSDVM.
7. Prove that OLS estimator is the matrix weighted averages of within and between group estimators.
8. Describe in detail the combined model of Adaptive Expectation and Partial Adjustment models of distributed lagged structures. How far is it different from other lag variable models ?
9. Define stationarity of a time series. How is it tested ? What is the relevance of judging stationarity ?