2017

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.

Group—A

1. Answer any *two* of the following : 2×2

   (a) Distinguish between an AR series and MA series.

   (b) Explain the concept of volatility, when modelling for financial time series.

(c) How is trend stationary process different from difference stationary process ?

(d) Why do we introduce lags in econometric models ?

2. Answer any *one* of the following : 1×6

(a) Describe briefly the Error Correction Mechanism (ECM).

(b) Distinguish between Dickey-Fuller test and Augmented Dickey-Fuller test for unit roots. How would you select lag length for carrying out these tests ?

3. Answer any *one* of the following : 1×10

(a) How will you estimate the Lagged variable model which is obtianed as a combination of partial and adaptive expectation models ? 10

(b) Explain why testing for cointegration is important in time-series regression. Discuss the different methods that are applied to test for cointegration.

Group—B

4. Answer any *two* of the following : 2×2

(a) How does the panel data regression model control individual haterogeneity ?

(b) What is Restricted F test is panel data regression ?

(c) Distinguish between balanced and unbalanced panel.

(d) Write three important differences between REM and FEM of panel data.

5. Answer any *one* of the following : 1×6

(a) Define a dynamic panel data model. Are the least squares dummy variable estimators consistent in a dynamic panel data model with individual effects ?

(b) Estimate the unobserved effects of FEM by LSDV.

6. Answer any *one* of the following : 1×10

(a) Discuss the assumptions made on the random disturbance term in random effects models. Can application of the method of OLS in random effects model result in consistent estimators ? If not, suggest a method of estimation that can be applied to overcome the problem.

(b) Distinguish between within-group and between-group variations in panel data. Prove that the OLS estimator in PDRM is the weighted sum of within-group and between-group estimators.

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