2008

ECONOMICS

[Special Paper : *Econometrics*- II]

PAPER—X

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 practiable.

Illustrate the answer wherever necessary

GROUP – A

1. Answer any *five* questions : 2×5

(*a*) Define error correction model (ECM) in time series.

(*b*) What do you mean by structural invariance ?

(*c*) Distinguish between a random walk model and a random walk with a drift model.

(*d*) Define partial autocorrelation function (PACF) in connection with time series.

(*e*) Give an example of panel data model.

(*f*) Why panel data is used ?

(*g*) What are the limitations of fixed effects model ?

(*h*) What is LSDV ?

(*i*) What is the basic assumption of L.M. Koyck scheme in the distributed lag model ?

(*j*) Explain the technological reason behind the existence of lag structure in econometric models.

GROUP – B

Answer any *two* questions

2. Distinguish between weak exogenity and strong exogenity in time series. 5

3. Define autoregressive distributed lag (ADL) relation and explain its connection with the long-run equilibrium relation. 3 + 2

4. Distinguish between AR model and MA model. 5

5. Which model is better – FEM or CEM ? Argue in favour of your answer. 5

GROUP – C

Answer any *two* questions

6. Explain in details the concept of co-integration in time series analysis. 10

7. Define unit root test. Explain the importance of unit root test in time series analysis. 4 + 6

8. Carefully distinguish the estimation procedure of FEM and REM. 10

9. How would you estimate the distributed lag model arrived at as a combination of adaptive expectation and partial adjustment structures. 10