2013

M.A/M.Sc.

3rd Semester Examination

ECONOMICS

PAPER—ECO–303E

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 :   2×5

1. (a) Distinguish between CLRM and GLRM.

   (b) What do you mean by seemingly unrelated regression ?

(Turn Over)

(c) Define the error component model.

(d) What is GLS ?

(e) Specify the Pooled Regression Model where the disturbances are cross-sectionally correlated and time wise autogressive.

(f) Give an example of an over-identified equation in a simultaneous equation system.

(g) What is Mongrel equation ?

(h) What is LIML ?

(i) What are the uses of PCA ?

(j) When shall you apply 3 SLS method of estimation ?

Group—B

Answer any *two* questions :   5×2

2. In case of Heteroskedastic disturbance term define 'P' matrix and prove that $P \Omega P' = I$.

3. How is GLRM useful for the prediction of future observation ?

4. Prove that OLS estimate is biased and inconsistent in simultaneous equation model.

5. Prove with a suitable example that ILS and 2 SLS estimates are same in just identified case.

Group—C

Answer any *two* questions :   10×2

6. Prove that GLRM estimator is BLUE.

7. Estimate the variance-covariance matrix in case of cross-sectionally correlated and time-wise auto regressive model.

8. Explain the 2 SLS estimation procedure. What are the advantages of 2 SLS over ILS ?

8+2

9. Explain the different steps involved in the method of principal components. What are the weaknesses of this method ?

8+2

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