M.Phil 1st Semester Examination, 2019

ECONOMICS

PAPER —ECO-112

Full Marks : 40

Time : 2 hours

Answer **all** questions

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

GROUP — A

1. Answer any *two* questions :   5 × 2

    (*a*) Distinguish between a Trend Stationary Process (TSP) and a Difference Stationary Process (DSP).

(b) Discuss briefly the different assumptions of a K variable Classical linear regression model.

(c) What do you mean by structural break ?

(d) Discuss the method of testing the presence of ARCH.

2. Answer any *one* question :　　　　　　　10×1

(a) How is the existence of a sensible long run relation between two economic time series ensured ?

(b) In a K variable Classical linear regression model, what happens to the maximum likelihood estimator of the slope vector, β, in the presence of linear restrictions ?

GROUP – B

3. Answer any *two* questions :　　　　　　　5×2

(a) What do you mean principal components ?

(b) What is scree plot ?

(c) Briefly explain the steps of GMM for estimation of dynamic panel data regression model.

(d) What is individual heterogeneity ? How does panel data control individual heterogeneity ? Explain.

4. Answer any *one* question : 10 × 1

(a) Explain the features of logit model. What are the measures of goodness of fit of this model ? Discuss the relations between logit and probit estimates.

(b) State and interpret different test criteria to select appropriate Panel Data Regression Model.

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