

**2018**

**M.Phil.**

**1st Semester Examination**

**ECONOMICS**

**PAPER—ECO-112**

*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* questions : 2×5
- (a) Write a note on Augmented Dickey Fuller (ADF) test.
  - (b) Discuss the different methods of measuring growth rate.
  - (c) What do you mean by volatility clustering?
  - (d) Discuss the method of testing the presence of ARCH.

*(Turn Over)*

2. Answer any one question : 1×10
- (a) Compare between unrestricted and restricted maximum likelihood estimator for a  $k$  variable classical linear regression model.
- (b) Explain in details the process of determining a valid long run equilibrium relation between two time series.

**(Group-B)**

3. Answer any two questions : 2×5
- (a) State and interpret the hypotheses for Restricted F-Test, LM-Test and Hansman Test.
- (b) The estimated results of the Panel Data Regression Model in STATA is given as follows :
- (i) Are the results sufficient to select FEM? Why?
- (ii) Interpret  $R_w^2$  and  $R_B^2$ .
- (iii) Interpret the coefficients which are statistically significant. 2+2+1
- (c) Explain the weaknesses of the linear probability model.
- (d) Explain the method of Principal component analysis with a suitable example.

4. Answer any one question :

1×10

- (a) For the PDRM  $Y_{it} = X_{it}\beta + \alpha_i + \varepsilon_{it}$  it estimate  $\beta$  by GLS and LSDV methods. Compare two estimated  $\beta$ .
- (b) Specify Logit Model. How can you compute marginal effects in Logit model? How can you compare Logit and Probit models?
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