

2013

M.A/M.Sc.

3rd Semester Examination

ECONOMICS

PAPER—ECO-301E

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

1. Answer any five of questions : 2×5

- (a) What is the meaning of the term 'regression' in the regression of a variable Y and another variable X?
- (b) What do you mean by statement that X (the regression) is non-stochastic?

(Turn Over)

- (c) Indicate the consequences of dropping a relevant explanatory variable from a multiple regression model.
- (d) What is "variance inflating factor" ?
- (e) What do you mean by a 'suppressor' variable ?
- (f) What are binary or dichotomous variables ?
- (g) How can you choose a model based on Mallow's Cp criterion ?
- (h) What do you mean by nested and non-nested models.
- (i) Illustrate Tobin model briefly with the help of a suitable example.
- (j) Write an ANCOVA model with an illustration.

Group—B

Answer any *two* questions :

5×2

- 2. Define enhancement synergism. Why does it occur?
- 3. What is adjusted R^2 ? What adjustments are actually made by it ?

4. What are the two important features that are needed in a probability model.
5. Present the Probit model based on Utility theory on rational choice perspective on behaviour as developed by McFadden.

Group—C

Answer any two questions : 10×2

6. Distinguish between partial and orthopartial correlation. What role do these two correlations play in explaining the importance of the explanatory variables ?
4+6
7. Distinguish among the following situations :
 - (a) All explanatory variables are significant and the R^2 is also significant.
 - (b) All explanatory variables are insignificant and R^2 is also insignificant.
 - (c) Some explanatory variables are significant and the R^2 is significant.
 - (d) Some explanatory variables are significant and the R^2 is insignificant.

- (e) All explanatory variables are significant and the R^2 is insignificant.
- (f) All explanatory variables are insignificant and the R^2 is significant.
8. (a) Discuss logit model with the help of a suitable example.
- (b) Discuss the method of estimating the model. State the limitation of this method of estimation.
9. Discuss any one test for each of nested and non-nested models.

5+5

5+5