M.A. 3rd Semester Examination, 2012

ECONOMICS

(*Econometrics Special*)

PAPER – IX (ECO-301E)

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 practicable

Illustrate the answers wherever necessary

GROUP – A

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

(*a*) Under what circumstances an explanatory variable is regressed on an explained variable ?

(*b*) Give two alternative interpretations of the regression coefficient in a multiple regression model.

(*c*) How is the intercept term affected with the exclusion of a relevant explanatory variable ?

(*d*) Define F test in the context of linear restriction on regression coefficients.

(*e*) Write any two problems associated with linear probability model ?

(*f*) What do you mean by latent-variable ?

(*g*) What is Censored sample ?

(*h*) How can you choose a model based on Akaike's Information criterion ?

(*i*) What happens when there is non-zero mean ?

(*j*) What is dummy variable ?

GROUP – B

Answer any *two* questions : 5×2

2. Discuss the tests of structural change.

3. Discuss the consequences of overfitting a model.

4. Under what circumstances the sign of the coefficient of an explanatory variable changes in the multiple regression model from the simple regression model ?

5. Mention a situation when multicollinearity may be treated as beneficial.

GROUP – C

Answer any *two* questions : 10 × 2

6. Define goodness of fit of a multiple regression model. Explain how goodness of fit is established/measured in the multiple regression model. 10

7. Define multicollinearity. Explain how the regression coefficients become unreliable in the presence of multicollinearity. 10

8. Illustrate Tobit model with the help of a suitable example. Write about the different characteristics of a logit model. 5 + 5

9. What happens when the regression are contemporaneously correlated with the error term ? In this connection suggest a remedy. 6 + 4