2025

(6th Semester)

ECONOMICS

(HONOURS)

Paper : Eco–603 (c)

(Econometric Methods)

Full Marks : 70

Pass Marks : 45%

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. (a) Discuss the objectives of econometrics. What are the basic characteristics of econometrical equations? 6+8=14

Or

(b) Explain the scope and limitations of econometrical study. 14

2. (a) What do you mean by the term 'Estimation' in econometric analysis? Explain 'small' and 'large' sample properties of an estimator. 4+10=14

Or

(b) What do you mean by 'Linear Regression Model'? What is disturbance term in econometrics? Explain the reasons for insertion of disturbance term in regression model. 3+4+7=14

3. (a) What do you mean by theoretical probability distribution? Discuss the salient features of the binomial, poisson and normal distribution. 2+12=14

Or

(b) What is statistical hypothesis? Explain briefly the procedures of a testing of a hypothesis. 4+10=14

4. (a) What is 'coefficient of determination'? Show that total sum of squares is equal to the explained sum of squares and residual sum of squares by assuming a hypothetical two-variable linear regression model. 4+10=14

Or

(b) Why does heteroscedasticity arise in regression analysis? Explain briefly the consequences and methods of detecting heteroscedasticity. 6+8=14

5. (a) What is 'lag' in econometric analysis? Explain Koyck Approach to distributed lag model. 14

Or

(b) Define 'Dummy variable'. Explain its features and uses in econometric analysis. 4+10=14

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