

2007

ECONOMICS

PAPER-XV

Full Marks : 100

Time : 4 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 whenever necessary

(Econometrics-I)

Marks : 50

Answer Q. No. 1 and any two questions from the rest

1. Answer any *two* questions : 10 x 2

(a) Distinguish between the maximum likelihood method and the least square method of estimation in classical linear regression model.

(b) Explain the chow test and its uses.

(c) **In a linear regression model with two regressors (x1 and xZ) it is given that simple $\beta_1 = 50$, incremental $\beta_2 = -40$ but simple $\beta_3 = 20$. Evaluate the partial importance of the two regressors.**

(d) **Explain the situations when the use of adjusted R2 is appropriate to examine the relative performance of regressions and when not.**

2. **What is an unbiased estimator? Explain the assumptions in Classical Linear Regression Model which ensures that the least squares estimators are unbiased. Do you think the unbiasedness property of least squares estimator is violated in presence of (a) heteroscedasticity and (b) near-exact multi-collinearity? Give reasons for your answer.** 3+6+3+3
3. **Define the autocorrelation problem. How is the presence of autocorrelation measured? What are the consequences of the problem.** 5+5+5
4. **Define multicollinearity. How is the presence of multicollinearity tested? Do you think that multicollinearity is always a problem?** 5+5+5
5. **What are the basic reasons behind the existence of lagged structure in an econometric model? Compare and contrast the Koyek model with the partial adjustment model in a distributed lagged structure.** 15

{Agricultural Economics-I}

(Marks : 50)

Answer any three questions

1. Describe the salient features of Semi-Feudal relations in agriculture. Do these relations resist change? 12+4

2. (a) '... the very commonly **used** single index, size of holding, is an unsatisfactory one except as a very **rough approximation to class status.**' **Do you agree with this view? Give reasons.** 4

- (b) **What are the two important criteria for understanding the Marxist position regarding economic classes ?** 2

- (c) **'... use of outside labour relative to the use of family labour would be the most reliable single index for categorising the peasantry.'** **Explain this statement.** 2

- (d) **Following U. Patnaik formulate E-ratio to categories the peasantry into mutually exclusive classes.** 8

3. 'The subjective decision (in Chayanov model) is seen as involving a trade off between the drudgery or irksomeness of farm work (disutility of work) and the income required to meet the consumption needs of the household (utility of income).'

(a) Consider the above statement and answer the following question : What is the main factor influencing this trade-off ? Explain. 4

(b) '... the way the economic problem of the peasant household is formulated in the Cheyanov model is to maximise utility subject to three constraints (i) production function, (ii) the minimum acceptable income level, and (iii) the maximum number of work"days` available.'
4J*
Const^er the above statement and find out the equilibrium position of the peasant household. 10

(c) Discuss the importance of family size and family composition in this model. 2

4. 'The quest for a better understanding of women into peasant economics begin with a set of concepts which are designed to place theoretical emphasis on difference in the economic situation of women and men.'

(a) Mention these concepts.

(b) Explain these concepts.

(c) Based on these concepts give theoretical justification for consideration of women in micro-economic analysis. 2+8+6

- S. Discuss the impact of technological change in agriculture on the different aspects of the economy. 16**
6. Write short **notes on** (any two) on the **following: 8+8**
- (a) Alternative theories of the formation of institutions.
 - (b) Imperfect markets and technological changes in **agriculture.**
 - (c) Scope of new home economics.
 - (d) Risk, uncertainty and peasants.