



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.A. DEGREE EXAMINATION – ECONOMICS

SECOND SEMESTER – APRIL 2017

16PEC2MC04 - ECONOMETRICS

Date: 26-04-2017
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

PART A

Answer any FIVE questions in about 75 words each

(5 x 4 = 20)

1. Define Econometrics.
2. What is Autocorrelation?
3. Distinguish between conditional expected values and unconditional expected values.
4. What is Stochastic Disturbance term?
5. What is a Dummy variable trap? How to avoid it?
6. Differentiate a distributed-lag model from an autoregressive model.
7. What are the steps involved in estimating Indirect Least Squares?

PART B

Answer any FOUR questions in about 300 words each

(4 x 10 = 40)

8. Explain the methodology of Econometrics.
9. State and prove the Gauss-Markov Theorem.
10. Consider the following regression model where neither Y nor X assumes zero value
$$\frac{1}{Y_i} = \beta_1 + \beta_2 \left(\frac{1}{X_i}\right) + u_i$$
 - a) Is this a linear regression model?
 - b) How would you estimate this model?
11. Explain the guidelines for choosing appropriate functional forms.
12. What is Heteroscedasticity? What are the reasons for Heteroscedasticity?
13. Show the bias involved in the direct application of least squares method in the Demand and Supply model.
14. Explain the features of 2SLS.

PART C

Answer any TWO questions in about 1200 words each

(2 x 20 = 40)

15. Do the units in which the regressand and regressor(s) are measured make any difference in the regression results? Explain how the regression model changes if the scale of measurement are changed.
16. Explain how the Generalized Least Squares method is capable of producing estimators that are BLUE.
17. Enumerate the consequences of errors of measurement in the dependent variable and the independent variable.
18. Explain the Koyck's approach to distributed-lag model.

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