# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.A.**DEGREE EXAMINATION – **ECONOMICS** 

SECONDSEMESTER – APRIL 2018

17/16PEC2MC04- ECONOMETRICS

Date: 23-04-2018 Time: 09:00-12:00 Dept. No.

Max.: 100 Marks

# PART – A

# Answer any FIVE questions in about 75 words each $(5 \times 4 = 20)$

- 1. Write a short note on 'Linearity' in Econometrics.
- 2. Distinguish between Stochastic error term and Residual error term.
- 3. What are 'standardized variables'?
- 4. State the procedure for avoiding a Dummy Variable Trap.
- 5. Distinguish between autocorrelation and serial correlation with relevant examples.
- 6. State the reasons for 'lags' in Economics?
- 7. Write a short note on Autoregressive schemes.

# PART – B

### Answer any FOUR questions in about 300 words each $(4 \times 10 = 40)$

- 8. State and prove the Gauss-Markov Theorem.
- 9. Explain the significance of  $r^2$  as ameasure of 'Goodness of Fit'.

10. Briefly explain the various reasons for the presence of Heteroscedasticity.

- 11. Explain the various types of specification errors with relevant examples.
- 12. Enumerate the procedure for estimating the partial regression coefficients in the presence of Multicollinearity.
- 13. Explain the application of ANCOVA models in regression models containing both quantitative and qualitative variables.
- 14. Explain the guidelines for choosing appropriate functional forms.

#### PART – C

#### Answer any TWO questions in about 1200 words each $(2 \times 20 = 40)$

- 15. Explain the methodology of Econometrics.
- 16. Elucidate the Two Stage Least Squares (2SIS) method of estimation. Explain the features of 2SLS.
- 17. Explain the application of OLS estimation in the various functional forms.
- 18. Enumerate the method to estimate distributed-lag models as proposed by Koyck.

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