

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



M.A. DEGREE EXAMINATION – ECONOMICS

THIRD SEMESTER – NOVEMBER 2018

EC 3813 – MODERN ECONOMETRICS

Date: 24-10-2018

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

PART A

Answer any **FIVE** of the following questions:-

[5x4=20 marks]

1. Define structural break using a suitable diagram.
2. State the employability of Recursive Least Squares.
3. Which test is appropriate for choosing the functional form of the regression model?
4. State the properties of integrated series.
5. Highlight the importance of ‘F’ ratio in testing the significance of a ‘K’ variable linear model.
6. What is meant by weak stationarity?
7. Differentiate ARMA and ARIMA models.

PART B

Answer any **FOUR** of the following questions:-

[4X10=40 marks]

8. Explain the idea behind Chow test.
9. Explain the LPM model by highlighting its assumptions and fallacies.
10. Discuss the CUSUM test employed for testing the structural break.
11. Outline the Random Effects approach.
12. Examine the Unit Root Test of Stationarity.
13. Illustrate the concept of ‘spurious’ regression.
14. State the procedure for testing the equality between two regression coefficients in a ‘K’ variable regression model.

PART C

Answer any **TWO** of the following questions:-

[2X20=40 marks]

15. Given the Cobb – Douglas production function $Y_i = \beta_1 X_{2i}^{\beta_2} X_{3i}^{\beta_3} e^{u_i}$ which follows constant returns to scale; How can we test whether the model satisfy some restrictions? Support your answer using suitable test procedure.
16. Discuss the possibilities of panel data models under Least Square Dummy Variable (LSDV) approach.
17. Compare and contrast Logit and Probit models.
18. Examine the key concepts in time series econometrics.

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