LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.A.DEGREE EXAMINATION –**ECONOMICS**

THIRD SEMESTER – **APRIL 2019**

16/17UEC3MC02– BASIC ECONOMETRICS

Date: 25-04-2019   Dept. No.   Max. : 100 Marks

Time: 01:00-04:00

PART -A

Answer any Five questions in about 75 words each   **(5 x 4 = 20 marks)**

1. Briefly explain the concept of theoretical and applied econometrics.
2. List the types of data in econometric analysis.
3. Briefly explain the concepts of population parameter and sample statistic.
4. Write a note on linearity in the parameters.
5. What is autocorrelation?
6. A salesman wants to know the average number of units he sells .He checks his past record and comes up with the following distribution

Sales in units	0	1	2	3	4	5
Probability	0.15	0.20	0.10	0.05	0.30	0.20

Calculate the average number of units he sells per sales call.

7. Write a short note on Sample Regression Function.

PART -B

Answer any FOUR questions in about 250 words each   **(4 x 10 = 40 marks)**

8. Explain the uses of econometrics.
9. Write a note on coefficient of determination.
10. A bag contains 6 white,4 red and 10 black balls. Two balls are drawn at random. Find the probability that both will be black.
11. Explain the significance of the stochastic variable.
12. Explain the concept of BLUE.
13. Draw a venn diagram to represent mutually exclusive events and explain the concept of dependent events.
14. List out the sources ofmulticollinearity.

1

PART –C

Answer any TWO questions in about 900 words each (**2 x 20 = 40 marks**)

15. Discuss the methodology of Econometrics.

16. Enumerate the assumptions of the Classical Linear regression model.

17.A) Differentiate heteroscedasticity and homoscedasticty.

   B) What are the causes for heteroscedasticity?

18. A) Find the regression equation for the data given:

Y_i	102	106	108	110	122	124	128	130	142	148	150	154
X_i	114	118	126	130	136	140	148	156	160	164	170	178

   B) State the difference between u_i and e_i.

****