

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.A.DEGREE EXAMINATION –ECONOMICS

THIRD SEMESTER – APRIL 2018

16UEC3MC02– BASIC ECONOMETRICS

Date: 07-05-2018

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

PART –A

Answer any FIVE of the following not exceeding 75 words each: (5 x 4 =20)

1. Define Econometrics
2. Explain the terms Time series data and cross sectional data.
3. State the Central limit theorem
4. If two coins are tossed once, what is the probability of getting a) both heads b) at least one head.
5. Two tests was conducted for a class, 25% passed both tests and 42% of the class passed the first test. What percentage of those who passed the first test also passed the second test?
6. List the properties of normal distribution.
7. What is meant by autocorrelation?

PART-B

Answer any FOUR of the following not exceeding 300 words each: (4 x 10 = 4)

8. Explain the scope of econometrics.
9. Write a note on population regression function.
10. Derive the formula of r^2 .
11. Explain the steps involved in hypothesis testing.
12. Write a note on the significance of the error term.
13. Explain marginal and conditional probability density functions.
14. Explain Gauss –Markov theorem

PART- C

Answer any TWO of the following not exceeding 900 words each: (2 x 20 = 40)

15. Discuss the methodology of Econometrics with an illustration
16. Enumerate the assumptions of the Classical Linear Regression model
17. From the following data

X	95	85	80	70	60
Y	85	95	70	65	70

a) Calculate b_0 and b_1

b) Calculate the value of Y_i when $X_i= 80$

c) Calculate r^2 and comment on the value.

18. Derive the normal equations to estimate the sample estimators for a two variable model.
