LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.A.DEGREE EXAMINATION – **ECONOMICS**

THIRD SEMESTER – **NOVEMBER 2018**

16/17UEC3MC02– BASIC ECONOMETRICS

Date: 25-10-2018   Dept. No.   Max. : 100 Marks
Time: 01:00-04:00

PART –A

ANSWER ANY FIVE   OF THE FOLLOWING NOT EXCEEDING MORE THAN 75 WORDS EACH   (5 x 4 = 20 Marks)

1. Define Econometrics.

2. List the aims of econometrics.

3. Distinguish between a population and a sample.

4. Write a note on Central Limit Theorem.

5. What is meant by R^2?

6. Define Heteroscedasticity using suitable diagram.

7. Find the probability of selecting a black card or a 6 from a deck of 52 cards.

PART –B

ANSWER ANY FOUR   OF THE FOLLOWING NOT EXCEEDING MORE THAN 300 WORDS EACH   (4 x 10 = 40 Marks)

8. Explain the properties of a good estimator.

9. Differentiate the stochastic disturbance term 'Ui' and the residual error term 'ei'.

10. Explain the following concepts:

    a. Conditional Probability.

    b. Mutually Exclusive events.

11. Write a note on Type I and Type II error.

12. List out the properties of normal distribution.

13. Explain the steps involved in hypothesis testing.

14. Explain the Confidence Interval approach to Interval estimation.

PART –C

ANSWER ANY TWO OF THE FOLLOWING NOT EXCEEDING MORE THAN 900 WORDS EACH (**2 x 20 = 40 Marks)**

15. Discuss the methodology of econometrics.

16. Enumerate the stochastic assumptions of the Classical Linear Regression Model.

17. Explain the concepts of Population Regression Function and Sample Regression Function using suitable diagram.

18. Consider the following information:

Y_i	40	44	46	48	52	58	60	68	74	80
X_i	6	10	12	14	16	18	22	24	26	32

a. Estimate the function : $Y_i = \beta_1 + \beta_2 X_i + U_i$.
b. Calculate $\sum e_i^2$.
c. Calculate R^2.

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