

**B. A. DEGREE END SEMESTER EXAMINATION - APRIL 2021****SEMESTER – 6: ECONOMICS (CORE COURSE)****COURSE: 15U6CRECO14A – INTRODUCTORY ECONOMETRICS**

*(Common for Regular 2018 admission & Improvement 2017/Supplementary 2017/ 2016/2015 admissions)*

Time: Three Hours

Max Marks: 75

**PART A**

***Answer all questions in one or two sentences. Each question carries 1 mark.***

1. Define Econometrics
2. Define the Stochastic or random variable
3. Unbiasedness
4. What is a Hypothesis
5. Exogenous and Endogenous variable
6. Homoscedasticity
7. What is meant by Simple Linear Regression?
8. BLUE
9. Normal distribution
10. Point Estimation (1 × 10 = 10)

**PART B**

***Answer any eight of the following in three or four sentences.***

***Each question carries 2 marks.***

11. Statistical inference
12. Time series Data and Cross section Data
13. Autocorrelation
14. Coefficient of Determination
15. Type I and Type II errors
16. Stochastic assumptions of OLS
17. State the general relationship between consumption Y and disposable income X in a) exact linear form and b) stochastic form
18. Goodness of fit
19. Multiple Regression
20. Theoretical and applied econometrics (2 × 8 = 16)

**PART C**

***Write any five of the following in not more than one page.***

***Each question carries 5 marks.***

21. Discuss in detail the OLS method, its merits and demerits?
22. What justifies the inclusion of a disturbance or error term in regression analysis?
23. State and prove the Gauss- Markov Theorem
24. What are the uses and limitations of econometrics?
25. Explain the methods for detecting autocorrelation.
26. What is meant by (a) A priori theoretical criteria (b) Statistical criteria (c)Econometric criteria  
(f) The forecasting ability of the model.
27. Describe the steps in Hypothesis testing. (5 × 5 = 25)

**PART D**

***Answer any two of the following in not exceeding four pages.***

***Each question carries 12 marks.***

28. Explain the methodology of Econometrics
29. Explain Classical Linear Regression Model? State its assumptions and formulate least square regression equation
30. What is Multicollinearity? Explain the causes, consequences, and detection of multicollinearity.
31. Estimate the least squares regression model for the data on monthly incomes and expenditures of seven households given in the table below and interpret the results.
 

I. Income (in 1000s)	35	49	21	39	15	28	25
II. Expenditure (in 1000s)	9	15	7	11	5	8	9

(12 × 2 = 24)

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