23U556

B.A DEGREE END SEMESTER EXAMINATION : NOVEMBER 2023

SEMESTER 5 : ECONOMICS

COURSE : 19U5CRECO10 : INTRODUCTORY ECONOMETRICS

(For Regular 2021 Admission and Supplementary 2020/2019 Admissions)

Time : Three Hours

Max. Marks: 75

PART A Answer All (1 mark each)

- 1. Gauss Markov Theorem.
- 2. Large sample properties.
- 3. Lin-log model.
- 4. Standard Error.
- 5. Hypothesis.
- 6. Least Square Method.
- 7. Stochastic disturbance term.
- 8. Sequencing.
- 9. What is Autocorrelation?
- 10. Explain Durbin-Watson test for Autocorrelation.

(1 x 10 = 10)

PART B Answer any 8 (2 marks each)

- 11. Diagrammatically represent the presence of autocorrelation.
- 12. Omitted Variable Bias.
- 13. Compound rate of growth.
- 14. Regression Analysis.
- 15. What are the desirable properties of good econometric model?
- 16. What is stochastic specification of PRF?
- 17. The Cochrane-Orcutt (CO) transformation.
- 18. Choice of functional form.
- 19. Stochastic specification of the SRF.
- 20. Perfect Multicollinearity.

 $(2 \times 8 = 16)$

PART C

Answer any 5 (5 marks each)

- 21. What is Multicollinearity? Explain its causes and consequences.
- 22. What are the uses and limitations of econometrics?
- 23. Explain the transformation of nonlinear regression models to linear relationships.
- 24. Analyse the various steps involved in econometrics research.
- 25. Discuss the difference between Log-lin model and Lin-log model.
- ^{26.} How can we ensure precision or reliability of OLS estimators $\hat{\beta}_1$ and $\hat{\beta}_2$?
- 27. Elaborate the coefficient of determination.

(5 x 5 = 25)

PART D Answer any 2 (12 marks each)

- 28. Define Multiple Regression Models? Discuss the importance of such models and its underlying assumptions.
- 29. What problem does heteroscedasticity cause? Discuss its nature and remedial measures?
- 30. Describe Classical Linear Regression Model.
- 31. Define econometrics and discuss the scope and limitations of the subject.

(12 x 2 = 24)