

M. A. DEGREE END SEMESTER EXAMINATION- OCTOBER 2025**SEMESTER 3 : ECONOMICS****COURSE : 24P3ECOT14 : BASIC ECONOMETRICS***(For Regular - 2024 Admission)*

Time : Three Hours

Max. Weights: 30

PART A**Answer any 8 questions****Weight: 1**

1. Analysis of covariance (ANCOVA) models (An)
 2. The Almon model (An)
 3. Parameter (U)
 4. Infinte lag models (An)
 5. Discuss the limitations of Economic Forecasting (U, CO 4)
 6. Autocorrelation (U)
 7. Discuss $E(U_i/X_i) = 0$ (U)
 8. Diagram Heteroscedasticity. (R)
 9. Structural equations (A)
 10. Ordinary Least Square (E)
- (1 x 8 = 8)**

PART B**Answer any 6 questions****Weights: 2**

11. Explain the reasons for lags in economic phenomenon. (U)
 12. Discuss the difference between R^2 and adjusted R^2 (An)
 13. How to measure short run and long run elasticities? (An)
 14. What are the causes and consequences of multicollinearity? (An)
 15. Discuss 'Recursive Models' ? (An)
 16. State and prove the Gauss Markov theorem. (E)
 17. Examine the Identification problems and conditions for identifying an equation ? (U)
 18. Explain the Adaptive Expectations Model and its significance in economic analysis? (An)
- (2 x 6 = 12)**

PART C**Answer any 2 questions****Weights: 5**

19. Explain the errors involved in violating the assumptions of classical linear regression model ? (An)
20. What are Distributed Lag Models? Explain the Koyck Model and the Almon Polynomial Distributed Lag approach, highlighting their assumptions and uses. (An, CO 4)
21. Explain the Indirect Least Square method of estimating simultaneous equation system ? Also discuss the superiority of 2SLS method over ILS method? (E)

22. How is the Simple Linear Regression Model estimated using the Ordinary Least Squares (OLS) method? Explain the properties of OLS estimators and the importance of the normality assumption in statistical inference. (An, CO 1)
- (5 x 2 = 10)

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
CO 1	Understands how to apply regression techniques to statistical data and the basic assumptions of regression techniques	U	22	5
CO 4	Learning the basics of time series econometrics and attain conceptual clarity.	A	5, 20	6

Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;