

TB245320Q

Reg. No : .....

Name : .....

INTEGRATED M.A EXAMINATION, FEBRUARY 2024  
2020, 2021 ADMISSIONS SUPPLEMENTARY (SAY)  
SEMESTER V - CORE COURSE Social Sciences - Economics  
EC05C23IM20 - Econometrics – I

Time : 3 Hours

Maximum Weight : 30

**Part A**

**I. Answer any Eight questions. Each question carries 1 weight**

**(8x1=8)**

1. What is the difference between statistics and econometrics?
2. Write the 3 aims of econometrics.
3. What do you mean by linearity in econometrics?
4. What do you mean by residual?
5. What do you understand by 'covariance' between two estimators  $\beta_1$  and  $\beta_2$ ?
6. Difference between regression and correlation.
7. What is level of significance?
8. What is p value?
9. Define raw  $r^2$ .
10. Write down the least square estimator for regression through origin model.



**Part B**

**II. Answer any Six questions. Each question carries 2 weight**

**(6x2=12)**

11. Explain the relationship between economic theory, mathematics, and economic statistics.
12. Difference between Statistical relationship and Deterministic relationship.
13. Explain the concept of Linearity.
14. Difference between SRF and PRF?
15. Explain the assumptions of Classical Linear Regression Model
16. Explain  $\chi^2$  test of testing the significance of regression coefficients.
17. Explain the idea of interval estimation.
18. What is Regression through Origin Model?

**Part C**

**III. Answer any Two questions. Each question carries 5 weight**

**(2x5=10)**

19. Explain the nature and scope of econometrics.
20. Give an account of the origin and interpretation of regression analysis.
21. Explain the assumptions of OLS Method.
22. Explain the two approaches of hypothesis testing.