

Reg. No. :

Name :

VI Semester B.A. Degree (CBCSS-Supple./Improv.)
Examination, April 2022
(2016 – 2018 Admissions)
CORE COURSE IN ECONOMICS/DEVELOPMENT ECONOMICS
6B15ECO : Basic Econometric Analysis

Time : 3 Hours

Max. Marks : 40

PART – A

Answer **all** questions. **Each** carries **one** mark.

1. What is an economic model ?
2. Describe the meaning of linearity.
3. Define Pooled data.
4. Describe the Principle of Least square.

(4×1=4)

PART – B

Answer **any seven** questions. **Each** carries **two** marks.

5. Distinguish between specification stage and estimation stage.
6. Examine the relationship between Econometrics and Mathematical Economics.
7. Discuss Stochastic and Non-Stochastic Relations.
8. What is meant by Conditional Expectation ?
9. Describe the meaning of Partial Regression Coefficients.
10. What is Alternative Hypothesis ?
11. Define the Statistical Inference.

P.T.O.



12. What is meant by Degrees of Freedom ?
13. Describe the p-value.
14. What is the Autoregressive scheme ? Discuss.

(7×2=14)

PART – C

Answer **any four** questions. **Each** carries **three** marks.

15. Explain the meaning and significance coefficient of determination.
16. Discuss the reason for introducing U in econometric model.
17. Give an account of Multiple Regression Analysis.
18. Explain meaning, types and methods of estimation.
19. Examine the Heteroscedasticity and different test for it.
20. Briefly discuss the Durbin Watson's 'd' statistic.

(4×3=12)

PART – D

Answer **any two** questions. **Each** carries **five** marks.

21. What is Econometrics ? State and explain the steps of econometrics methodology with example.
22. State and prove that the OLS estimators are BLUE.
23. What is multicollinearity ? Briefly explain the reasons, consequences and remedial measures of multicollinearity.
24. Given the following data on number of hours which 10 students studied and their scores on test.

Hours	X	4	9	10	14	4	7	12	22	1	17
Score	Y	31	58	65	73	37	44	60	91	21	80

- a) Fit a least square regression line that approximates the regression of the test scores (Y) on number of hours studies (X).
- b) Find the estimated score for the number hours of study 4 ($Y\hat{i}_{x=4}$). (2×5=10)