



K21U 0016

Reg. No. : .....

Name : .....



**VI Semester B.A. Degree (CBCSS – Reg./Supple./Improve.)**  
**Examination, April 2021**  
**(2014-2018 Admissions)**  
**CORE COURSE IN ECONOMICS/DEVELOPMENT ECONOMICS**  
**6B15ECO : Basic Econometric Analysis**

Time : 3 Hours

Max. Marks : 40

**PART – A**

Answer **all** questions. **Each** question carries **1** mark :

1. What is p value ?
2. Explain Population Regression Line (PRL).
3. Time Series Data.
4. Random or Stochastic Variables.

**PART – B**

Answer **any seven** questions. **Each** question carries **2** marks :

5. Distinguish between ratio scale variable and a nominal scale variable.
6. Explain type I and type II error.
7. What is simple and multiple regressions ?
8. What is linearity in variable and parameter ? Explain.
9. What do you mean by heteroscedasticity ?
10. Explain the terms in the econometric model  $Y_i = \beta_1 + \beta_2 X_i + U_i$ .
11. Ordinary Least Squares (OLS).
12. What are point and interval estimators ?
13. Standard error.

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14. Elaborate the concept of autocorrelation.
15. Expand BLUE.
16. What is confidence interval ?
17. Null hypothesis and alternative hypothesis.
18. What is ANOVA ?

PART - C

Answer **any four** questions. **Each** question carries **3** marks :

19. State the importance of error term in an econometric model.
20. Discuss types of econometrics.
21. What are the different sources of data used in empirical analysis ?
22. Identify the definition and scope of econometrics.
23. Multiple linear regression model, establish the procedure for forming normal equations in a multiple regression analysis.
24. Explain the coefficient of determination,  $r^2$ .
25. Derive the normal equation of  $\beta_1$  hat and  $\beta_2$  hat in a simple regression model.
26. What are the different types of data for empirical analysis ?

PART - D

Answer **any two** questions. **Each** question carries **5** marks :

27. Explain the methodology of econometrics.
28. Discuss the classical linear regression model and the assumptions underlying the method of least squares.
29. What is multicollinearity ? Suggest methods to detect it and identify remedial measures to overcome multicollinearity.
30. What is hypothesis testing ? Discuss the confidence interval approach and the test of significance approach.
31. What is econometrics ? Discuss the relevance and limitations of econometrics.
32. Explain the Gauss Markov theorem.