TB245847G

Reg. No :.....

Name :.....

BACHELOR'S DEGREE (C.B.C.S.) EXAMINATION, FEBRUARY 2024

2021 ADMISSIONS SUPPLEMENTARY (SAY)

SEMESTER V - CORE COURSE (ECONOMICS)

EC5B10B18 - Introductory Econometrics

Time : 3 Hours **Maximum Marks : 80**

Part A

I. Answer any Ten questions. Each question carries 2 marks **(10x2=20)**

1. What is deterministic component of a regression equation?
2. Describe pooled data and panel data.
3. Explain the term 'RSS'.
4. Define OLS.
5. How is Condition Index used to detect multicollinearity?
6. Explain Runs test.
7. What can you conclude if the degree of multicollinearity is high?
8. How do we express qualitative explanatory variables in regression? What are its other names?
9. State an equation that contain dummy variable.
10. What are lagged values in time series data? Give an equation.
11. Describe a linear investment function.
12. What is the relation between rate of decline and speed of adjustment in Koyck model?

Part B

II. Answer any Six questions. Each question carries 5 marks **(6x5=30)**

13. Briefly explain the collection of data and estimation of model in econometric research.
14. Illustrate least-squares criterion using equations and diagrams.
15. Discuss the advantages of OLS method. State the normal equations involved in the estimation of parameters.
16. Analyse the reasons for the occurrence of heteroscedasticity.
17. Examine the theoretical consequences of multicollinearity.
18. Illustrate a dummy variable model in the form of equations.
19. Examine the nature of dummy variables.
20. Examine Stock Adjustment Model.
21. The following table includes total cost and the level of output. Estimate the linear cost function.

Year	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Output	40	42	48	55	65	79	88	100	120	140
Cost	150	140	160	170	150	162	185	165	190	185

Part C

III. Answer any Two questions. Each question carries 15 marks **(2x15=30)**

22. Write a note on estimators. What are the properties of a good estimator?
23. Give a detailed analysis of coefficient of determination.
24. Discuss the nature of the problem of heteroscedasticity. Summarize the methods to detect the problem of heteroscedasticity.
25. Examine features of Adaptive Expectations Model and Stock adjustment model.