BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, NOVEMBER 2024
2022 ADMISSIONS REGULAR
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. Define the term 'econometrics'.

2. What is deterministic component of a regression equation?

3. Comment on least-squares criterion.

4. What is Gauss-Markov theorem?

5. Describe white noise error term.

6. Differentiate positive autocorrelation and negative autocorrelation.

7. Define less than perfect collinearity among explanatory variables.

8. What is ANOVA? Give example in the form of an equation.

9. How can we use dummy variable as proxies for dependent variable?

10. What are lagged values in time series data? Give an equation.

11. How is an autoregressive model different from distributed lagged model?

12. Explain adhoc estimation is lagged model.

Part B

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

13. State a simple linear regression equation. Explain the coefficient and intercept terms in it. Represent them graphically.

14. Elucidate the procedure involved in the estimation of parameters by OLS method.

15. Illustrate TSS, RSS and ESS by means of equations and diagrams.

16. Write a note on Park test.

17. What is multicollinearity? Differentiate perfect multicollinearity and less than perfect multicollinearity.

18. How is dummy variable used to measure shift of a function?

19. Write a short note on nature of dummy variables and its uses.

20. Analyse Koyck approach to distributed lag models.

21. Outline the adaptive expectations model popularised by Friedman and Cagan.

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. Analyse the method of estimation of PRF based on SRF using equations and diagrams.

24. Analyse the reasons for the occurrence of heteroscedasticity? What are its consequences?

25. Write a note on Koyck model. Examine Koyck transformation with the help of equations. What are its features?