M A DEGREE (CSS) EXAMINATION, NOVEMBER 2023

Third Semester

Faculty of Social Sciences

MA Econometrics

CORE - EM010304 - MULTIVARIATE TIME SERIES ECONOMETRICS

2020 ADMISSION ONWARDS

E41803B9

Time: 3 Hours   Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. Define lurking variables.

2. Define principal component analysis

3. Define DSGE models

4. What do you mean by VAR (1)model?

5. Discuss Granger causality

6. Explain the purpose of Toda and Yamamoto Procedure

7. What is known as Cointegrating rank?

8. Explain Long-Run Structural Modelling

9. Explain Forecast Error Variance Decomposition

10. What is a temporary shock? Explain with the help of an example.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. Explain the estimation of a just identified equation.

12. Briefly explain multivariate time series forecasting

13. Distinguish between VAR & SVAR

14. What is Bounds test and how is it used in ARDL models?

15. What is Unit roots test? Why is it suggested before testing for cointegration?

16. What is Beveridge-Nelson Decomposition Technique? What are its advantages and disadvantages?

17. Explain traditional impulse response analysis.

18. Explain Generalized Impulse Response Function

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. What is a simultaneous equation model? Explain its nature and associated variables. What do you mean by simultaneous equation bias? Elucidate the reasons for such bias.

20. Examine multivariate rational expectations modeling in economics

21. What are the tests for cointegration in the single equation model? Explain the E-G methodology.

22. What is an impulse response function? Distinguish between orthogonalized and generalized impulse response function.

(2×5=10 weightage)