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K24P 3014

Reg. No.:	
Name :	

III Semester M.A. Degree (C.B.C.S.S. – OBE-Regular)
Examination, October 2024
(2023 Admission)

# ECONOMICS/APPLIED ECONOMICS/DEVELOPMENT ECONOMICS MAECO 03C13/MAACO 03C13/MADCO 03C13 : Advanced Econometrics

Time: 3 Hours

Max. Marks: 60

#### PART - A

Short Answer Questions. Answer any 5 questions.

- 1. What is the difference between stochastic and deterministic trends?
- 2. What is meant by VECM? Why do we use VECM?
- 3. Explain cointegration.
- 4. Explain random walk model. What are the types of random walk?
- 5. What are the desirable properties of an estimator?
- Prepare a note on Eigen vectors and Eigen values.

 $(5 \times 3 = 15)$ 

#### PART - B

Short Essay Questions. Answer any 3 questions.

- Explain autoregressive conditional heteroskedasticity.
- 8. Describe ARMA and ARIMA models.
- 9. What is the difference between AIC and BIC criterion?
- Explain important approaches to economic forecasting based on time series data.
- 11. Explain the meaning and significance of Covariance Matrix.

 $(3 \times 6 = 18)$ 

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## PART - C

Essay Questions. Answer any 3 questions.

- Explain ARCH model. Discuss how ARCH model is different from GARCH model.
- What do you mean by tests for stationarity in a time series? Explain Dickey Fuller and Phillips-Perron tests.
- 14. What do you mean by panel data analysis? Explain Fixed Effect Model and Random Effect Model.
- 15. Differentiate between factor analysis and principal component analysis.
- Define time series regression. How do you interpret the coefficients in a time series regression? Explain the CLRM assumptions underlying a time series regression model. (3x9=27)