Reg. No. : .	
Name ·	

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

ECONOMICS/DEVELOPMENT ECONOMICS/APPLIED ECONOMICS MAECO02C09/MAACO02C09/MADCO02C09 : Basic Econometrics

Time: 3 Hours

Max. Marks: 60

SECTION - I

Short Answer Questions (Any 5).

 $(5 \times 3 = 15)$

- 1. Explain PRF.
- 2. Discuss Linear Regression analysis.
- 3. What are the partial regression coefficients?
- 4. Explain the dummy variable trap.
- 5. Explain Autocorrelation.
- 6. Compare ANOVA and ANCOVA models.

SECTION - II

Short Essay Questions (Any 3).

 $(3 \times 6 = 18)$

- Explain the concept of Coefficient of determination (r²).
- 8. What is Heteroscedasticity? Explain various methods for its detection.
- Compare the simple and multiple regression analysis.
- Write a note on Piece-wise linear regression analysis.
- 11. Comment on Ramsey's RESET test.

P.T.O.

K24P 1013

SECTION - III

Essay Questions (Any 3).

(3×9=27)

- 12. Explain the Gauss-Markov Theorem.
- What is Multi-collinearity? Explain the methods for detecting and solving the problem of multi-collinearity.
- 14. For the following data, fit a regression model that exhibits saving as a function of disposable income using OLS. Also estimate the value of savings when income is 40 crores.
 Disposable Income

Disposable Income (in crores of rupees

(in crores of rupees): 10 12 16 18 22 24 28 30 34 36

Savings

(in crores of rupees): 8 9 12 14 18 20 22 25 28 30

- Explain Simultaneous Equation Models. Examine different forms of Simultaneous equation systems.
- Discuss various regression models with qualitative dependent variables.
 Explain the situations in which these models are useful.