



**K24P 1013**

**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).**

**(5×3=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).**

**(3×6=18)**

7. Explain the concept of Coefficient of determination ( $r^2$ ).
8. What is Heteroscedasticity ? Explain various methods for its detection.
9. Compare the simple and multiple regression analysis.
10. Write a note on Piece-wise linear regression analysis.
11. Comment on Ramsey's RESET test.

**P.T.O.**



## SECTION – III

Essay Questions (Any 3).

(3x9=27)

12. Explain the Gauss-Markov Theorem.
13. 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****(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

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

