

QP CODE: 25009475



Reg No

Name

.....

# B.A DEGREE (CBCS) SPECIAL REAPPEARANCE EXAMINATIONS, FEBRUARY 2025 Fifth Semester

## CORE COURSE - EC5CRT10 - INTRODUCTORY ECONOMETRICS

Common for B.A Economics Model I, B.A Economics Model II Foreign Trade & B.A Economics Model II Insurance

2022 Admission Only

AA5747FB

Time: 3 Hours

Max. Marks: 80

Instructions to Private candidates only: This question paper contains two sections. Answer SECTION I questions in the answer-book provided. SECTION II, Internal examination questions must be answered in the question paper itself. Follow the detailed instructions given under SECTION II.

#### Part A

Answer any ten questions.

Each question carries 2 marks.

- 1. Dependent Variable.
- 2. An Event.
- 3. Define Population regression function.
- 4. Define SRF.
- Define Conditional Mean.
- Define Least Squares Estimators.
- 7. Derive the mean value of disturbance Ui.
- 8. What is R<sup>2</sup>?
- 9. Distinguish between an estimate and estimator.
- 10. Explain interval estimation.
- 11. What is multiple regression?
- 12. What is meant by heteroscedasticity?



#### Part B

Answer any six questions. Each question carries 5 marks.

- 13 Briefly explain the concept of linearity in econometrics.
- 14. Explain SRF.
- 15. Explain the numerical properties of OLS.
- 16 What is BLUE?
- 17 Give a short note on coefficient of determination.
- 18. Define hypothesis. What are the steps in hypothesis testing?
- 19 Give a short note on t test.
- 20. What happens if the normality assumption of the stochastic term is violated?
- 21. Why is autocorrelation a problem?

 $(6 \times 5 = 30)$ 

### Part C

Answer any **two** questions.

Each question carries **15** marks.

- 22. Write the equations for
  - 1.PRF
  - 2.SRF
  - 3. Multiple regression model.

Also write the assumptions of CLRM and Multiple Regression models.

- 23. What is OLS method?. Bring out its statistical and numerical properties.
- 24. Bring out the properties of OLS estimators.
- 25. Write a note on the procedure of hypothesis testing.

(2×15=30)