## QP CODE: 25009475

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## **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

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.

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- 1. Dependent Variable.
- 2. An Event.
- 3. Define Population regression function.
- 4. Define SRF.
- 5. Define Conditional Mean.
- Define Least Squares Estimators. 6.
- 7. Derive the mean value of disturbance Ui.
- 8. What is R<sup>2</sup>?
- Distinguish between an estimate and estimator. 9.
- 10. Explain interval estimation.
- 11. What is multiple regression?
- 12. What is meant by heteroscedasticity?

 $(10 \times 2 = 20)$ 



Max. Marks: 80

#### 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?

(6×5=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)