



QP CODE: 22100146



22100146

Reg No : .....

Name : .....

**B.A DEGREE (CBCS ) REGULAR / REAPPEARANCE EXAMINATIONS,**

**JANUARY 2022**

**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)

**For Regular Candidates : 2017 Admission Onwards**

**For Private Candidates : 2019 Admission Only**

1ADFC746

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**

**SECTION I**

**Part A**

Answer any **ten** questions.

Each question carries **2** marks.

1. Define Conditional and Unconditional Mean.
2. Joint Probability Distribution.
3. Statistical or Econometric Function.
4. Define SRF.
5. Write down a linear population regression function.
6. Define Least Squares Estimators.
7. Derive the Covariance of  $U_i$ .
8. Define the coefficient of determination.
9. Define an estimate .
10. Briefly explain t test.
11. What is point estimation and interval estimation?
12. What is meant by heteroscedasticity?





(10×2=20)

**Part B**

Answer any **six** questions.

Each question carries **5** marks.

13. Briefly explain the concept of linearity in econometrics.
14. Differentiate between Type I and Type II errors. Which is a more serious error?
15. Explain the numerical properties of OLS.
16. Compare and contrast correlation and regression.
17. Why do we calculate goodness of Fit ?
18. Briefly explain the ' t test' criteria for testing the significance of slope coefficient in simple regression.
19. Briefly explain the statistical properties of the OLS estimates of multiple regression.
20. Why is autocorrelation a problem?
21. How can multicollinearity be detected?

(6×5=30)

**Part C**

Answer any **two** questions.

Each question carries **15** marks.

22. Explain the definition and scope of econometrics.
23. State Gauss Markov theorem. Mention the numerical and statistical properties of CLRM.
24. Explain the Stochastic, interpretation and its significance.
25. What are the steps in econometric model building?

(2×15=30)

