2025

(FYUGP)

(5th Semester)

ECONOMICS

(MAJOR)

Paper Code : EC5.CC10

(Introductory Econometrics)

Full Marks : 75
Pass Marks : 40%

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer **five** questions, taking **one** from each Unit

UNIT—I

1. Explain the nature and sources of data for econometric analysis. 15

2. Write notes on the following : 5×3=15

(a) Statistical vs. deterministic relationship

(b) Regression vs. Causation

(c) Regression vs. Correlation

UNIT—II

3. Discuss the properties of estimators. Why are unbiasedness and efficiency important in econometric estimation? 10+5=15

4. Explain Type I and Type II errors. Discuss the probability distribution of test statistics. 7+8=15

UNIT—III

5. Elaborate on the properties of Least Square Estimators (BLUE) in Simple Linear Regression Model (SLRM). 15

6. Explain the coefficient of determination. What does it measure? Discuss its limitations. 7+3+5=15

UNIT—IV

7. Clearly explain the problems of estimation, notation and assumptions of multiple linear regression model. 15

8. What is multiple coefficient of determination? Show the derivation of R^2. Also, write a note on the multiple coefficient of correlation. 2+10+3=15

UNIT—V

9. Explain the nature and detection of multicollinearity. 7½+7½=15

10. What is heteroscedasticity? Discuss its causes, consequences and remedial measures. 3+12=15

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