

2024

(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*

UNIT—I

1. Define econometrics. Discuss the nature and scope of econometrics. 1+7+7=15

OR

2. Describe the methodology of an econometrics research. 15

(2)

UNIT—II

3. Define normal distribution. What are the different properties of normal distribution? Briefly explain the importance of normal distribution. 2+8+5=15

OR

4. What is hypothesis testing? Explain the steps involved in hypothesis testing. 3+12=15

UNIT—III

5. Consider the regression model :

$$Y_i = \beta_0 + \beta_1 X_i + U_i$$

- (a) What are the reasons for the inclusion of the random variable in an econometric model?

- (b) Estimate the parameters of the regression model by OLS method.

5+10=15

OR

6. What are the assumptions of classical linear regression model? State and prove Gauss-Markov theorem. 5+10=15

(3)

UNIT—IV

7. Write notes on the following : 5+5+5=15

(a) Assumptions of multiple regression analysis

(b) Partial regression coefficients

(c) Partial correlation coefficients

OR

8. What are R^2 and adjusted R^2 ? What are the key differences between R^2 and adjusted R^2 in regression analysis? Write the interpretation of multiple regression equation. 10+5=15

UNIT—V

9. What do you mean by multicollinearity? What are its consequences? What are its remedial measures? 2+8+5=15

OR

10. What is autocorrelation? Explain the nature of autocorrelation. 3+12=15
