

Goa Vidyaprasarak Mandal's
Gopal Govind Poy Raiturcar College of
Commerce and Economics, Ponda Goa.

M.Com. Semester -III End Examination, October- November 2024

COM 601: Basic Econometrics

Duration: 2 Hours

Total Marks: 40

Instructions: 1) This paper consists of **six** questions carrying **equal** marks.
2) Question No. **1** consists of **5 compulsory** questions of **2 marks each**.
3) Answer **any three** questions from Q. No. **2,3,4,5 and 6**.
4) Each question carries 10 marks.

Q.1. Answer the following.

(Marks) (CO) (BL)

- a) Discuss the Partial Autocorrelation Function (PACF). (02) (04) (01)
- b) What is a correlation, and how can we interpret the value of a correlation coefficient in a dataset? (02) (01) (01)
- c) Briefly explain ANOVA. (02) (04) (02)
- d) Consider the following Model:
$$Y_i = \alpha + \beta_1 X_1 + \beta_2 X_2 + U_i.$$

Interpret the model with the help of a graph. (02) (01) (03)
- e) Explain Panel Data with an example. (02) (03) (01)

Q.2. Discuss the methodology of econometric analysis.

(10) (01) (01)

Q.3. Explain the issues in regression analysis.

(10) (02) (01)

Q.4. Apply and show the interaction effect using dummy variables in regression analysis. (10) (03) (01)

Q.5.A. What is non-stationarity in time series data?

(05) (04) (01)

B. What are the detection methods and remedies for non-stationarity

(05) (04) (02)

Q.6.A. What is a misspecification error in the econometric model?

(05) (04) (01)

B. What are the consequences and remedies for misspecification in the Econometric model?

(05) (04) (01)