

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

**M.Com. Semester -II End Examination, April 2024**

**COM 603: Advanced Econometrics**

Duration: 2 Hours

Total Marks: 40

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**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. Figures to the **right** indicate marks.

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**Q.1. Answer the following.**

**(5x2=10)**

- 1) What are the limitations of the Linear Probability Model?
- 2) Interpret logit model  $L_i = \ln\left(\frac{P_i}{1-P_i}\right) = \theta + \beta x_i + u_i$ .
- 3) Write the importance of stationarity in time series data.
- 4) What is pooled OLS regression?
- 5) What is the importance of VAR?

**Q.2.** Assume that the p-value for the Granger Causality test is less than 0.05 frame the hypothesis and explain Granger Causality and its interpretation. **(10 Marks)**

**Q.3.** Explain Impulse Response Function (IRF) and Forecast Error Variance Decomposition (FEVD) **(10 Marks)**

**Q.4.** Explain the ARDL Model. What are the uses of the ARDL model? **(10 Marks)**

**Q.5.** Explain the GARCH Model and its implications **(10 Marks)**

**Q.6.** Provide explanations for the following.

- a) Fixed Effect Model
- b) Random Effect Model

**(10 Marks)**