### 2016

# VIDYASAGAR UNIVERSITY PH. D. COURSE WORK EXAMINATION

#### **ECONOMICS**

PAPER-ECO-112

Full Marks: 40

Time: 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

#### Group-A

- 1. Answer any two questions from the following:  $2\times5$ 
  - (a) What do you mean by cointegration between two time series available for a long period? What is the basic implication of the existence of cointegration? 3+2

- (b) Define error correction model (ECM) in the context of time series analysis. Briefly discuss its main properties. 2+3
- (c) Discuss the different methods of measuring growth rate.
- (d) Specify an ARCH(1) and GARCH(1,1) model. Explain the difference between the two. 2+3
- 2. Answer any one question from the following:  $1 \times 10$ 
  - (a) Briefly discuss the methodologies that are normally adopted in explaining different types of fluctuations observed in macro time series.
  - (b) How do you estimate the slope vector, β for a K-variable CLRM using maximum likelihood estimation method? What happens to this estimator in the presence of linear restriction?

## Group-B

3.	An	swer any two questions from the following: 2×	( (
	(a)	Explain the problems of LPM?	
	(b)	What is Probit model? What is the relation between Logit and Probit estimates?	e:
	(c)	Explain the test-criteria to select the appropriate panel data regression model.	t 5
	(d)	Briefly explain the advantages of panel data.	5
4.	An	swer any one question from the following: 1×1	O
¥	(a)	What is Logit model? What are the properties of it How is the goodness of fit measured in this model	
	(b)	Estimate the parameters in Random Effect Mode (REM).	