2019

MA/MSc

4th Semester Examination

ECONOMICS

PAPER – ECO-402(E)

Full Marks : 50

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: 2x2

   a) How would you measure capital input in the empirical estimation of production function?

   b) How will you take care of the problem of multi-product firm in the estimation of cost function?

   c) What do you mean by MTD with usual meaning?

   d) What are the basic limitations of cross section and time series data?

2. Answer any ***ONE*** question: 1x6

   a) Write a short note on Translog production function and comment on the studies on Indian industries using this production function.

   b) Present a brief description of the various mathematical forms used in the estimation of investment function.

3. Answer any ***ONE*** question: 1x10

   a) How would you estimate the money demand function in a single equation frame-work? Mention the departures made here, when money supply also changes.

   b) How would you conduct a Family Budget Survey? Mention the basic variables that are normally considered in this survey and also discuss the measurement problems for the same. How would you solve the problems? 3+4+3=10

Group-B

4. Answer any ***TWO*** questions: 2x2

a) Mention the basic features of RBI-MSE macro model for the Indian economy.

b) Define and explain Coppock's measure of fluctuation.

c) Briefly explain Cuddy-Della-Valla's measure of fluctuation given by $cv(Y)\sqrt{1-\bar{R}^2}$.

d) Show that a Random Walk Model is necessarily a non-stationary time series process.

5. Answer any ***ONE*** question: 1x6

a) Present a detailed description of the trend in Macro Econometric model Construction.

b) Suppose you have the time series data on Agricultural Production (in US billion $) and Quantity of Methane Emission (in metric tonne) for the middle income countries as given below-

Year	Agricultural Value Added	Methane Emission
1990	597	452
1991	578	461
1992	525	467
1993	513	447
1994	566	454
1995	625	448
1996	686	450
1997	688	517
1998	666	464
1999	645	451
2000	639	448
2001	643	458
2002	674	479
2003	751	483
2004	854	508
2005	934	528
2006	1054	551
2007	1293	540
2008	1545	552
2009	1566	566
2010	1871	571
2011	2175	582
2012	2285	592

Discuss in detail the methodological procedures for examining the long run associations and short run dynamics between Agricultural value added and Methane Emission for the group of middle income countries at the global level.

6. Answer any ***ONE*** question: 1x10

a) What is meant by macro-econometric model? - Explain. How would you differentiate between endogenous variables and pre-determined variables? Write a short note on Klien-Goldberger macro model.

b) How will you use dummy variables to build up a model for explaining two breaks in the growth path of a macro time series?

(Internal Assessment : 10 Marks)