

**M.Phil 1st Semester Examination, 2019**

**ECONOMICS**

**PAPER –ECO-113**

*Full Marks : 40*

*Time : 2 hours*

*The figures in the right hand margin indicate 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 : 5 × 2

(a) Discuss the steps involved in the estimation of translog cost function. 5

(b) What do you mean by linear expenditure system? Explain the two decomposable parts of it. 2 + 3

(c) What is the form of  $\sigma_t^2$  in GARCH(1, 1) model? Show that the conditional variance is effectively an ARMA model for GARCH (1, 1) model. 1 + 4

(d) Define "disembodied technical change". Consider a Cobb-Douglas production function with scale parameter and determine the rate of disembodied change. 1 + 4

2. Answer any *one* question : 10 × 1

(a) Present a detailed picture of the empirical estimation of economic capacity utilisation.

(b) Write any five agricultural production functions and find partial elasticities of inputs for those functions.

## GROUP-B

3. Answer any *two* questions : 5 × 2

(a) Consider the "Weston and Lustgarten" equation for testing "administered-inflation" hypothesis and explain the equation. 5

(b) Consider the following money demand and supply equations :

$$M = 0.0618Y - 0.0025r_s Y + 0.6860M_{-1} + 23.0600 + \dots$$

(0.0126)
(0.0007)
(0.0728)
(4.9783)
→ (1)

$$R^2 = 0.992 \quad d = 1.885$$

$$M = M^* [0.0751(r_s - r_d) + 0.8522 + \dots]$$

$$R^2 = 0.726, \quad d = 1.536 \rightarrow (2)$$

Interpret these equations. The notation have usual meanings. 3 + 2

(c) Mention the possible variables in determining demand for money for the present Indian economy with their respective signs and interpretations. 5

(d) Derive the Lucas supply function from the Phelps interpretation of the Phillips curve. 5

4. Answer any *one* question : 10 × 1

(a) Consider money supply as endogenous and then present Teigen's simultaneous-equation model of money demand and supply. 10

(b) Discuss theoretically the chronological developments of macroeconomics starting from classical thought to New Keynes with relative assessment regarding policy interventions and results. Briefly discuss the essential components of the RBI-MSE macro model for the Indian economy. 5 + 5