

M.A/M.Sc 3rd Semester Examination, 2019

ECONOMICS

PAPER — ECO-302(A + B)

Full Marks : 40

Time : 2 hours

Answer all questions

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

Write the answers to questions of each Paper in separate books wherever necessary

ECO-302A
(*Econometrics II*)

GROUP—A

1. Answer any *two* questions : 2 × 2

(a) What is meant by the 'spurious regression' problem ?

- (b) What is meant by 'cointegration' ?
- (c) Write the Irvin Fisher's (1925, 1937) presentations of the 'finite distributed lag' model.
- (d) Distinguish between 'predeterminedness' and 'strict exogeneity'.

2. Answer any *two* questions : 4 × 2

- (a) Indicate whether the following statement is true (T), false (F) or uncertain (U) and give brief explanation :
Both mean and variance of a random walk series with drift change over time. 4
- (b) Prove that 'Granger non-causality' is neither necessary nor sufficient for determining exogeneity. 4
- (c) What is volatility ? Present the 'mean equation' and 'variance equation' of a k -variable linear ARCH(P) model. 2 + 2
- (d) Is GARCH (p, q) an improvement over ARCH(P) ? Discuss. 1 + 3

3. Answer any *one* question : 8 × 1

- (a) What is the 'error correction mechanism' (ECM)? Explain how the ECM reconciles the short-run behaviour of an economic variable with its long-run behaviour. 2 + 6
- (b) What is 'unit root'? Discuss the 'Augmented Dickey Fuller's unit root test. 3 + 5

GROUP-B

4. Answer any *two* questions : 2 × 2

- (a) What do you mean by self-selectivity bias in Panel Data ?
- (b) What are differences between REM and FEM ?
- (c) Distinguish between within-group variation and between-group variation of panel data.
- (d) State and explain the two way classifications of Panel Data Regression Model.

5. Answer any *two* questions : 4 × 2

- (a) Briefly explain the advantages of Panel Data.
- (b) What is the appropriate method of estimation of REM ? Why is this method appropriate ? Estimate the parameters of REM using this method.
- (c) Estimate the parameters of Partitioned Regression Equation.
- (d) Briefly explain the alternative test criterion to select the appropriate Panel Data Regression Model.

6. Answer any *one* question : 8 × 1

- (a) Show that OLS estimator of Panel Data Regression Model is the weighted sum of between-group and within-group estimators.
- (b) State the features of FEM and estimate the parameters of this model.

ECO-302B

(Agricultural Economics)

GROUP-A

1. Answer any *two* questions from the following : 2×2
- (a) Write down some important factors responsible for backwardness in Indian agriculture.
 - (b) Mention two major causes of low productivity in Indian agriculture.
 - (c) What do you mean by diversification in 'Indian Agriculture' ?
 - (d) What is TPDS ?
2. Answer any *two* questions from the following : 4×2
- (a) Discuss the challenge of agricultural diversification for achieving growth with equity in Indian Agriculture. 4
 - (b) What are the different dimensions of food security ? Discuss each of them. 1 + 3

(c) How can you explain the positive relationship between farm size and productivity in Indian agriculture. 4

(d) What are the different methods for measuring efficiency in Indian agriculture. Discuss each of them very briefly. 1 + 3

3. Answer any *one* question from the following : 8 × 1

(a) Discuss rural indebtedness and social factors in the context of backwardness of Indian agriculture.

(b) Discuss the challenge of inclusive growth and food grain management for achieving growth with equity in Indian agriculture.

GROUP-B

4. Answer any *two* questions : 2 × 2

(a) Mention different components of land reforms in India.

- (b) Differentiate FDI from FPI.
- (c) What is disembodied technical change ?
- (d) Distinguish between Game theory and Decision theory.

5. Answer any *two* questions : 4 × 2

- (a) Determine the "Solow residual" by considering a three factors agricultural production function.
- (b) Discuss the impacts of land acquisition made by the state and central governments in India upon agricultural production.
- (c) State and discuss on possible merits and demerits of FDI in Indian agricultural products.
- (d) Discuss the bottlenecks in implementation of the "land reform" measures in India.

6. Answer any *one* question : 8 × 1

- (a) Discuss critically the impacts of FDI in Indian agricultural system. 8

(b) What are the main risks that a typical farmer faces? Discuss how these fundamental sources of risk affect production decisions.

2 + 6
