

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

ECONOMICS

PAPER – ECO-303(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

ECO-303A

(Econometrics III)

GROUP—A

1. Answer any *two* questions :

2 × 2

(a) Define with example ordered and unordered variables.

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- (b) Distinguish between CLRM and GLRM.
- (c) Specify the nature of the disturbance terms of CCTA.
- (d) Explain the seemingly unrelated regressions.

2. Answer any *two* questions : 4 × 2

- (a) Determine the partial effects of the multinomial logit model.
- (b) Distinguish between ordered logit and ordered probit model.
- (c) What is GMM? What's the reason for using GMM if MLE is asymptotically efficient?
- (d) In case of heteroskedastic disturbance term prove that $P \Omega P = I$.

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

- (a) Write down the methods of elimination of the problems autocorrelation and heteroscedasticity in the disturbance terms of CHTA Model.

- (b) Specify the Error Component Model and find out the relationship among different error terms. Estimate the variance-covariance matrix of this Model.

GROUP-B

4. Answer any *two* questions of the following : 2×2
- (a) What is simultaneous equation bias ?
 - (b) Write the order and rank condition of identification of an equation in simultaneous equation system.
 - (c) What is recursive system ?
 - (d) What are the three stages in 3SLS method ?
5. Answer any *one* question of the following : 4×2
- (a) Explain the method of ILS.
 - (b) Explain the method of Principal Components with a suitable example.

6. Answer any *one* question of the following : 8×1

(a) Discuss briefly the steps involved in 2SLS. Check with a suitable example whether the ILS and 2SLS estimates will be same if 2SLS method is applied in exactly identified case. $4 + 4$

(b) What is logit model ? Explain the method of estimation of this model. Write any two measures of goodness of fit of logit model. $3 + 3 + 2$

ECO-303B

GROUP-A

1. Answer any *two* questions of the following : 2×2

(a) Distinguish between complementary product and joint product.

(b) What are the different types of agricultural market ?

(c) What do you mean by futures trading in agricultural commodities ?

(d) What is market integration ?

2. Answer any *two* questions of the following : 4×2

(a) Find partial elasticities of inputs for any four agricultural production functions used in agricultural economics. 4

(b) Write the different measures for instability of prices of agricultural commodities. 4

(c) Explain with example the price spread of agricultural commodities. 4

(d) What are the factors that affect the individual and market demand for agricultural goods ? How the demand function can be estimated ? $2 + 2$

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

(a) What is market efficiency ? What are the different measures of market efficiency ? $2 + 6$

- (b) Explain Nerlovian model of agricultural supply response function. Explain T.N. Krishnan's model of marketable surplus. 4 + 4

GROUP-B

4. Answer any *two* questions : 2 × 2
- (a) What do we mean by farm management ?
- (b) Write the definition of production frontier.
- (c) What do you mean by Good Farming Practices ?
- (d) What can be the possible value of Ph factor of soil regarding its acid and alkali base ?
5. Answer any *two* questions : 4 × 2
- (a) Name the economic principles applied to farm management. Discuss briefly any one of the principles. 1 + 3
- (b) Explain how operation research technique can be used to solve farm management problems. 4

- (c) Describe necessities of good farming practices in the world of changing climate conditions. 4
- (d) Elucidate different steps of farm budgeting to optimize the objective of the farm houses. 4

6. Answer any *one* question : 8 × 1

- (a) Name the two types of Farrell's measure of efficiencies. Discuss both of them briefly. 2 + 6
 - (b) Explain in detail how the farm houses manage their farm resources for better earning and sustainable farming practices. 8
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