

POST-GRADUATE DEGREE PROGRAMME

Term End Examination — December, 2024

ECONOMICS

**Paper-XXA : APPLICATION OF STATISTICS AND
ECONOMETRICS IN AGRICULTURAL ECONOMICS (PRACTICAL)**

Time : 2 hours]

[Full Marks : 50

Weightage of Marks : 100%

Special credit will be given accuracy and relevance in the answer. Marks will be deducted for spelling, untidy work and illegible handwriting. The weightage for each question has been indicated in the margin.

Use of scientific calculator is strictly prohibited.

1. Answer any *four* of the following questions : $2\frac{1}{2} \times 4 = 10$
- a) What factors do influence the marketable surplus of agricultural goods ?
 - b) What do you mean by forecasting ?
 - c) What are the components of time series data ?
 - d) Mention some major sources of climate change.
 - e) What do the parameters of Cobb-Douglas Production Function indicate ?
 - f) What is the difference between marketable surplus and marketed surplus ?
2. Answer any *four* of the following questions : $5 \times 4 = 20$
- a) Distinguish between qualitative analysis and quantitative analysis of forecasting.
 - b) Write a short note on linear production function.
 - c) Briefly state the method of fitting a second degree trend equation.
 - d) Explain the concept of simultaneous equation bias.
 - e) Write a short note on co-efficient of variation around trend value of a variable.
 - f) Distinguish between exogenous variables and endogeneous variables in a model.

3. Answer any *two* of the following questions : 10 × 2 = 20

- a) Show that the Iso-quant obtained from CES production function is negatively sloped and convex to the origin. 5 + 5
 - b) Discuss Raj Krishna model to explain price elasticity of marketed surplus of a subsistence crop.
 - c) Use the Cobweb model to explain instability in agricultural prices.
 - d) Briefly explain the mitigation strategies in agriculture.
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