

CHUKA



UNIVERSITY

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EXAMINATION FOR THE AWARD OF DIPLOMA IN AGRICULTURAL ECONOMICS

AGEC 0241: AGRICULTURAL PRODUCTION ECONOMICS

STREAMS: DIP. AGEC

TIME: 2 HOURS

DAY/DATE: FRIDAY 13/12/2024

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS:

- Answer ALL questions in SECTION A and any THREE in SECTION B.
- Do not write on the question paper

Section A: ALL questions are Compulsory (25 Marks)

- Explain the factor-factor relationship as used in decision-making (8 Marks)
- Discuss the internal and external economies of large-scale production. (7 Marks)
- Discuss five basic production problems (10 Marks)

Section B: Answer Any Three Questions (45 Marks)

Question Two (15 Marks)

- Discuss four types of Production Functions (8 Marks)
- List five properties of isoquants (5 Marks)
- Discuss the four factors of production (2 Marks)

Question Three (15 Marks)

- Explain the economic decisions made in the three stages of production (6 Marks)
- Discuss four types of Product-Product Relationships (4 Marks)
- Define the law of diminishing returns and list four reasons for its operation in agriculture.

(5 Marks)

Question Four (15 Marks)

- a) Discuss four sources of risks and uncertainty in agriculture (8 Marks)
- b) State five goals of production economics (5 Marks)
- c) Define agricultural production economics and fixed inputs (2 Marks)

Question Five (15 Marks)

Given the following production function;

$$Y = 50 + 2.2X + 3X^2 - 0.2X^3$$

- a) Calculate the TPP, APP, MPP at the following levels of input use between 0 to 15 input level (12 marks)
 - b) List three reasons why the law of diminishing returns operates (3 Marks)
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