



(Knowledge for Development)

KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR

FOURTH YEAR 2ND SEMESTER
SPECIAL/SUPPLEMENTARY EXAMINATIONS

FOR THE DEGREE OF BACHELOR OF SCIENCE AGRICULTURE
AND BIOTECHNOLOGY, BACHELOR OF SCIENCE AGRICULTURE
EDUCATION AND EXTENSION & BACHELOR OF EDUCATION
SCIENCE.


COURSE CODE: SAB 482
COURSE TITLE: PRODUCTION ECONOMICS

DATE: 20TH JANUARY 2022 **TIME:** 11 – 1 PM

INSTRUCTIONS TO CANDIDATES

Answer Question ONE and any other TWO Questions.

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over 

KIBU observes ZERO tolerance to examination cheating

QUESTION ONE**30 MARKS**

- a) Define Agriculture Production economics and outline the four basic production problems it addresses. (10 marks)
- b) Given the total cost function: $C = 1000 + 100Q - 15Q^2 + Q^3$ (10 Marks)
- calculate the total and average costs at the output level of 5 packets
 - What is the marginal cost of the 12th packet?
- c) With the aid of diagrams, explain the following relationships among farm enterprises (10 marks)
- Competitive products
 - Joint products

QUESTION TWO**20 MARKS**

- a) Discuss the major sources of risk and uncertainty for farmers in Kenya (8 Marks)
- b) What methods and techniques can small-scale farmers in Kenya use to reduce risk and uncertainty in farming. (12 Marks)

QUESTION THREE**20 MARKS**

- a) Define the term production function and state three important assumption that underly its development. (5 Marks)
- b) The classical production function can be divided into three stages based on the efficiency of resource utilization. Discuss these three stages and in your answer indicate why a rational firm should or should not produce at each stage. (15Marks)

QUESTION FOUR**20 MARKS**

Differentiate between the following terms

- Short run and long run Production function
- Marginal rate of Product substitution and Marginal rate of input substitution
- Isoquant and iso resource curves
- Perfect Substitutes and Perfect Complements
- Productive efficiency and allocative efficiency

QUESTION FIVE**20 MARKS**

- a) Given the following economic functions

$$Q_a = -40 + 30p$$

$$Q_b = 180 - 25P$$

Where P is Price and Q is quantity.

- Which of the two functions could represent a demand curve? A supply curve? and why? (3 marks)
 - At what values of price and quantity is the market in equilibrium? (5 marks)
- b) In what type of market is a firm able to charge different prices for the same product? What is this situation called and what are the characteristics of this type of market? (12 Marks)