



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE
AND TECHNOLOGY**

UNIVERSITY EXAMINATIONS 2012/2013

**1ST YEAR 1ST SEMESTER EXAMINATIONS FOR THE DEGREE
OF BACHELOR OF SCIENCE (FOOD SECURITY AND
BIODIVERSITY) AND BSC. AGRIBUSINESS MANAGEMENT**

(REGULAR)

COURSE CODE: APT 3114

COURSE TITLE: INTRODUCTION TO AGRICULTURE

DATE: 24/4/2013 TIME: 9.00-11.00AM

DURATION: 2 HOURS

INSTRUCTIONS

- 1. This paper contains TWO sections.**
- 2. Answer ALL questions in section A (Compulsory) and ANY other Two questions in section B.**
- 3. Write all answers in the booklet provided.**

SECTION A

Question 1 [10 Marks]

- (a) Livestock sub-sector is an important driver of the economy of Kenya. State any two key roles of Animal genetic resources in Kenya (2Marks)
- (b) Which are the main genetic groups of the following animal genetic resources of Kenya
(i) Camels; and (ii) Poultry. (2Marks)
- (c) Generally, consideration of farming systems should account for all inputs and outputs of each element of the system .On the basis of this approach, state and briefly explain the four farm sizes found in Kenya. (4 Marks)
- (d) Briefly describe the following terms:
(i) Productivity; and (iii) Food and agricultural production (1Marks)
- (e) Differentiate between mixed farming and intercropping (1 Marks)

QUESTION 2 (10 Marks)

- (a) Explain the importance of the following in crop production:
(i) timely planting; (ii) seedbed preparation; and (iii) weed control. (3Marks)
- (c) Explain the disadvantages of: (i) sandy soil; and (ii) acidic soil. (2Marks)
- (b) List the objectives of soil tillage. (2Marks)
- (e) Give examples of **one** primary tillage implement and **two** secondary tillage implements (3Marks)

QUESTION 3 (10 MARKS)

- (a) Explain the term crop rotation. Describe briefly the advantages of crop rotation.(4Marks)
- (b) List the factors to be considered in choosing an intercropping system. (3Marks)
- (c) Briefly describe the methods of crop harvesting. (3Marks)

SECTION B 30 MARKS

QUESTION 4 (20 Marks)

Agricultural marketing plays an important role, not only in stimulating production and consumption, but also in accelerating the pace of economic development.

- (a) i. Brief discuss any five factors explaining the importance of Agricultural marketing (5 Marks)
- ii. Define “Marketable surplus” and state five (5) factors which affect marketable surplus. (5 Marks)

- (b) i. The special characteristics which the agricultural produce possesses make them differ from the manufactured products marketing.
- ii. State and briefly explain five defining characteristics of agricultural produce in relation to marketing. (5 Marks).
- iii. What do you understand by the term “marketing mix”? And what is important to the customer in marketing mix? (5 Marks)

QUESTION 5 (20 Marks)

The special characteristics, which the agricultural produce possesses, make them differ from the manufactured products marketing.

- (a) State and briefly discuss five defining characteristics of agricultural produce in relation to marketing. (10 Marks)
- (b) What do you understand by the term “marketing mix”? (10 Marks)

QUESTION 6 (20 Marks)

Discuss in detail the following terms:

- (a) Biological pest control (10 Marks)
- (b) Recombinant DNA technology (10 Marks)