

**UNIVERSITY OF KABIANGA**

**UNIVERSITY EXAMINATIONS**

**2014/2015 ACADEMIC YEAR**

**SUPPLIMENTARY/SPECIAL EXAMINATION**

**FOURTH YEAR FIRST SEMESTER EXAMINATION**

**FOR THE DEGREE OF BACHELOR OF ARTS (ECONOMICS)**

**COURSE CODE: ECO 416**

**COURSE TITLE: AGRICULTURAL ECONOMICS I**

**DATE: 25TH AUGUST, 2015**

**TIME: 9.00 A.M- 12.00 P.M**

**INSTRUCTIONS TO CANDIDATES:**

Answer question **ONE** and any other **THREE** questions.

**QUESTION ONE (25 MARKS)**

1. Explain using PPF model the technical feasibility of a farm production unit. (6 marks)
2. Discuss the input-output decision of a farm operator can make in relations to agricultural production. (7 marks)
3. i. Briefly explain the uses of linear programming model. (4 marks)

ii. An agricultural-based company has 4 different types of production processes producing components used in the production of product T and product S. Process 1 and 2 produces components for product T while processes 3 and 4 produce components for product S. The resources required for producing these components are labour expressed in man-hours and raw materials; B and R. The table below gives the full technology and input restrictions.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **Component of product T** | | **One component of products** | | **Total available** |
|  | **Process 1** | **Process 2** | **Process 3** | **Process 4** |  |
| Man hour | 1 | 1 | 1 | 1 | 15 |
| Units of B | 7 | 5 | 3 | 2 | 120 |
| Units of R | 3 | 5 | 10 | 13 | 100 |
| Unit profit | 4 | 5 | 9 | 11 |  |

**Required;**

Using the information from the table, formulate a linear programming model. (8 marks)

**QUESTION TWO (15 MARKS)**

Discuss the various sources of risks and uncertainties related to agricultural activities. (15 marks)

**QUESTION THREE (15 MARKS)**

Describe **three** types of production responses to an input of production in a production function using only one varying input of production, in combination with fixed inputs. (15 marks)

**QUESTION FOUR (15 MARKS)**

1. explain the subject matter of agricultural economics. (6 marks)
2. explain the role market intelligence can play in agricultural production. (9 marks)

**QUESTION FIVE (15 MARKS)**

Give an assessment of the characteristics of marketing of agricultural products. (15 marks)

**QUESTION SIX (15 MARKS)**

Discuss the special characteristics of agricultural production. (15 marks)