

**UNIVERSITY OF KABIANGA**

**UNIVERSITY EXAMINATIONS**

**2014/2015 ACADEMIC YEAR**

**FOURTH YEAR FIRST SEMESTER EXAMINATION**

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

**COURSE CODE: ECO 416**

**COURSE TITLE: AGRICULTURAL ECONOMICS I**

**DATE: 11TH DECEMBER, 2014**

**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. Discuss four reasons why markets fail to allocate resources efficiently. (8 marks)
2. Explain the concept of substitution effect in regards to the purchase of farm inputs, for example fertilizer. (5 marks)
3. An agro-based company is manufacturing two different types of products: P1 and P2. Each product requiring processing of milling and drilling machines. But each type of machine has limited hours available per week. The net profit per unit of the product resource requirement and availability of resources are summarized in the table:

Processing time (hours)

|  |  |  |  |
| --- | --- | --- | --- |
| Machine type | Product | Product | Machine hour available per week. |
|  | P1 | P2 |  |
| Milling machine | 2 | 5 | 200 |
| Drilling machine | 4 | 2 | 240 |
| Profit per unit (ksh) | 250 | 400 |  |

**Required;**

Develop a linear programming problem (LPP) to determine the optimal production volume of each of the products such that the profit is maximized subject to the availability of machine hours. (5 marks)

1. Give your understanding of the concepts:
2. Vertical integration. (2 marks)
3. Marketable surplus. (2 marks)
4. Agricultural economics. (2 marks)
5. Agricultural production economics. (2 marks)

**QUESTION TWO (15 MARKS)**

1. Explain why the marketing costs of agricultural commodities are high. (8 marks)
2. Suggest the possible measures that can be used to reduce marketing costs in regards to agricultural commodities. (7 marks)

**QUESTION THREE (15 MARKS)**

1. Discuss the managerial problems facing small holder farmers. (6 marks)
2. Explain the typical farm management decisions. (9 marks)

**QUESTION FOUR (15 MARKS)**

1. Differentiate between the concepts: technical efficiency, economic efficiency and allocative efficiency. (3 marks)
2. Describe how forward markets can help address the problems facing an agriculturalist in regards to the marketing of agricultural commodities. (12 marks)

**QUESTION FIVE (15 MARKS)**

1. Describe a factor-factor decision a farm operator can make in relations to choosing combination of inputs. (8 marks)
2. Explain briefly how agricultural marketing process creates utility. (7 marks)

**QUESTION SIX (15 MARKS)**

1. Give your understanding of the concepts;
2. Marketing. (1 mark)
3. Farm utility. (1 mark)
4. Law of diminishing returns. (1 mark)
5. Risk. (1 mark)
6. Give the reasons that explain the existence of price difference along the marketing chain. (5 marks)
7. Discuss any **one** model for analyzing farmers’ behavior under uncertainty. (5 marks)