

**CHUKA**



**UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**FIRST YEAR EXAMINATION FOR THE AWARD OF DEGREE OF MASTER OF  
SCIENCE IN ECONOMICS**

**MSEC 842: AGRICULTURAL ECONOMICS**

**STREAMS: MSC ECON Y1S2**

**TIME: 3 HOURS**

**DAY/DATE: THURSDAY 12/04/2018**

**2.30 P.M. – 5.30 P.M.**

**INSTRUCTIONS:**

- Answer all questions in section A and any two in section B.
- Answer each question on separate pages.

**SECTION A**

**SECTION A: ANSWER ALL QUESTIONS (20 MARKS)**

1. (a) Discuss the potential of agricultural technology in poverty reduction in the context of African economics. (5 marks)
- (b) An appropriate technology, as asserted by the economists should promote values such as health, beauty and permanence Low cost and low maintenance requirements. Discuss the characteristics of appropriate agricultural technology. (5 marks)
- (c) Discuss the implication of high population on Agricultural production systems in Africa. Give relevant examples where necessary. (5 marks)
- (d) Farming systems are dynamic. Discuss the relevance of this statement with regard to the achievement of farm objectives. (5 marks)

**SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)**

2. (a) The household is the centre of agricultural production in the Sub-Saharan Africa and Asia. In light to this statement, describe the role of the household in agricultural development. (8 marks)
- (b) Describe the measures that a typical farming household can embark in order to reduce risks and uncertainty associated with the agricultural production. (6 marks)
- (c) Describe the role of the following factors in lowering transaction costs in agricultural production and exchanges in Africa.
- (i) Contractual arrangements. (2 marks)
  - (ii) Regulations. (2 marks)
  - (iii) Social capital. (2 marks)
3. (a) Using current relevant examples, discuss the following four mega-factors influencing agricultural policy in general and financial decision making in agriculture.
- (i) Environmental issues. (3 marks)
  - (ii) Monetary policy. (3 marks)
  - (iii) Fiscal policy. (3 marks)
  - (iv) International trade agreements. (3 marks)
- (b) Farmer attitudes and behaviours are influenced by a range of economic, external, internal and social factors. Discuss the validity of this statement. (6 marks)

4. You are given the following scenario:

The farmers in Utopia are highly in debt because the demand in their only export market for the main product (Product A) they produce, has been unstable. Agriculture in Utopia is a major industry and government's taxes on exports and farmers' income as well as interest rates are high. Farm and thus government income is because of this, also unstable. However, new technology makes it possible to venture into an alternative product. (Product B) with a demand structure opposite that of Product A.

The Utopian government have in the past not participated in international trade and other negotiations. With negotiations it is for instance possible to open other export markets

with alternative uses for Product A. Because of the high cost, government is reluctant to assist in combating MIV/AIDS in Utopia.

You are appointed special advisor to government.

Your first task is to advise government (in writing) on its existing policies. It will be expected that you will motivate them to change by explaining the effect of its existing and/or alternative policies available on Utopia's economy. (10 marks)

Your second task is to write an opinion on improving stability of farm and government income via diversification in export and domestic markets by for instance propagating Product B amongst the farmers. Also use statistical explanation to stress your point. (10 marks)

5. You are appointed as the new product development manager of a bank. The agricultural division requests you to design a credit scoring system for small farmers. Describe the process and the system that you will design to fulfil their request. Keep in mind the stochastic nature of agricultural production and the fact that different farms have different farm and farmer circumstances. Further, note the farm and the household are interdependent. (20 marks)
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