2019 JUNE EXAMINATIONS

Faculty Life Sciences

Department Crop Science

LCS 1204 Introduction to Agricultural Economics

Duration: **3 Hours**

Examiner: **Olga Mapanje**

INSTRUCTIONS TO CANDIDATES

1. Answer **ALL** the **FIVE** questions in this question paper.
2. Start the answer to each full question on a fresh page.
3. Each question carries **20 marks**.
4. This question paper comprises 4 printed pages including cover page.
5. **SPECIAL REQUIREMENTS : CALCULATOR, AND RULER**

QUESTION 1

a) Assuming a closed economy with firms, households, and the government: with the aid of a clearly labelled diagram, outline the flow of activities in that economy. **[8]**

b) What is the difference between a Command economy and a Market economy? **[2]**

c) The agricultural sector of many developing economies in Sub-Saharan Africa is changing rapidly. Give an outline of some of the most **important trends** in these agriculture-based economies. **[10]**

QUESTION 2

a) With the aid of clearly labelled diagrams, explain the difference between 'change in demand' and 'change in quantity demanded.' **[2]**

b) Give any one exception of the **Law of Demand.** **[1]**

c) A study of the tobacco industry revealed that a10% increase in cigarette prices would cause a 5% decrease in cigarette consumption. What is the price elasticity of demand for cigarettes? **[2]**

d) Explain why the concept of **Elasticity of Demand** is important in International Trade. **[3]**

e) If the demand of farm products is highly price **inelastic**, a bumper crop may reduce farm incomes. Illustrate this on a graph and explain. **[2]**

f) Give any one determinant of the supply of agricultural products by smallholder farmers in Zimbabwe. **[1]**

g) Graphically explain the following relationships, using relevant examples from Zimbabwean agriculture:

i. Factor- factor relationship **[3]**

ii. Factor- product relationship **[3]**

iii. Product- product relationship **[3]**

QUESTION 3

Table shows hypothetical cost and revenue data for the production of maize by Mr Nyathi, a farmer in Filabusi. Quantity of maize (Q) is given in tonnes and costs/ revenues are in dollars.

Q	T.V.C	T.F.C	T.C	T.R	M.R	M.C	Profit
0	0		1000	0	0	0	
1			2000	1700			
2			2800	3300			
3			3500	4800			
4			4000	6200			
5			4500	7500			
6			5200	8700			
7			6000	9800			
8			7000	10800			
9			9000	11700			

a) Copy and complete the table by populating the TVC, T.F.C, M.R, M.C and Profit columns. **[5]**

b) Mr Nyathi sells his maize in a **perfectly competitive market** at Esigodini Growth Point. Give a detailed outline of the main characteristics of this market. **[10]**

c) Graphically illustrate how Mr Nyathi will **maximize** his profits in the short run. (**NB.** Do not use the cost/ revenue data given above, draw the general graphs) **[3]**

d) Suppose that in a perfectly competitive maize industry the Government of Zimbabwe (GoZ) decides to set a price floor. Draw and label a diagram showing the price floor set by the government. **[2]**

QUESTION 4

a) What do you understand by the term '**Opportunity Cost?**' The market price of unshelled groundnuts is $3 a bucket, and the market price of maize is $5 a bucket. A farmer can produce 200 buckets of either groundnuts or maize. If the farmer chooses to produce maize, what is his opportunity cost? **[4]**

b) In economics, it is assumed that individuals (consumers/ producers) are 'rational.' Explain what is meant by '**rational behaviour**' of consumers. **[2]**

c) Differentiate between Total Utility and Marginal Utility. **[2]**

d) State the Law of Diminishing Marginal Utility? **[2]**

e) Give the 3 assumptions that explain consumer behaviour. **[3]**

f) Draw separate Indifference Curves to illustrate the following types of goods:
   i. Imperfect substitutes **[2]**
   ii. Perfect substitutes **[2]**
   iii. Perfect compliments **[2]**

QUESTION 5

a) Define the following macroeconomic variables:
   i. Gross Domestic Product **[2]**
   ii. Inflation **[2]**

b) Explain what you understand from the following terms and in each case give a remedy/ solution that can be adopted if it occurs in agriculture:
   i. Tragedy of the Commons **[3]**
   ii. Externalities **[3]**

c) Explain the role that the government plays in the following cases:
   i. Promoting and securing competition **[3]**
   ii. Providing public goods **[3]**
   iii. Protecting against externalities **[3]**
   iv. Stabilizing growth in the economy **[3]**