



**GWANDA STATE UNIVERSITY**  
**FACULTY OF LIFE SCIENCES**  
**DEPARTMENT OF CROP SCIENCE**  
**BACHELOR OF SCIENCE HONOURS DEGREE IN CROP/ANIMAL SCIENCE**  
**LCS 1204 INTRODUCTION TO AGRICULTURAL ECONOMICS**  
**FIRST SEMESTER EXAMINATION PAPER**  
**NOVEMBER 2019**

**Duration:** 3 hours  
**Total Marks:** 100  
**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**

**MARK ALLOCATION**

QUESTION	MARKS
SECTION A	40
SECTION B	60
<b>TOTAL ATTAINABLE MARKS</b>	<b>100</b>

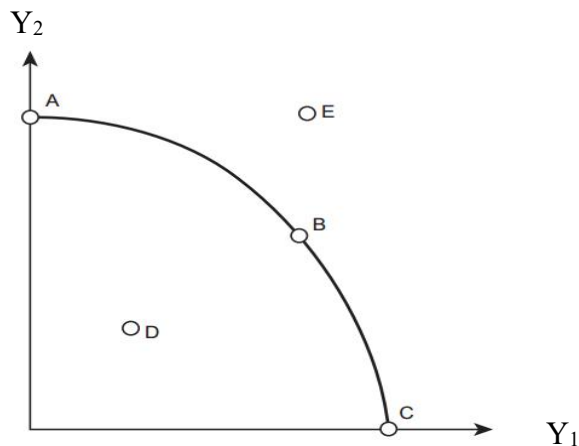
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## QUESTION 1

a) Explain using **mathematical formula and graphical presentations** the following technical relationships:

- i. Factor- Factor [5]
- ii. Factor- Product [5]

b) The diagram below shows a typical Production Possibility Curve (PPC):



- i. What does a PPC represent? [2]
- ii. What is represented by points A, B, C, D and E on the PPC? [5]

c) The table below represents points on a farmer's Production Possibility Curve.

Maize (kg)	Wheat (kg)
1000	0
900	100
800	200
700	300

What is the opportunity cost of increasing the production of maize from 700 kg to 900 kg? [3]

## QUESTION 2

- a) State and explain any 4 determinants of demand. [4]
- b) Explain using graphs the difference between the change in quantity demanded and change in demand. [2]
- c) Explain what you understand by the following terms:
  - i. Own Price Elasticity of Demand [2]
  - ii. Cross Price Elasticity of Demand [2]

- d) The elasticity of demand for tomatoes is 0.6. If the price of tomatoes increases from \$2/kg to \$3/kg, what will the impact be on the quantity demanded of tomatoes? [4]
- e) Explain the importance of the concept of Elasticity of Demand in determining the following:
- i. Producer Price [2]
  - ii. Government Policies [2]
  - iii. International Trade [2]

### QUESTION 3

- a) Write short notes on the following economic concepts:
- i. Optimization [2]
  - ii. Model [2]
  - iii. Resources [2]
  - iv. Scarcity [2]
- b) Mrs Sibanda produces broiler chickens and sells them at a monopolistically competitive market in Bulawayo.
- i. Give any 5 characteristics of a firm under monopolistic competition. [5]
  - ii. **State and explain** any 3 factors that could shift Mrs Sibanda's supply curve for the broiler chickens. [3]
- c) Suppose that in a perfectly competitive market for maize, the government decides to set a **price floor**:
- i. Draw and label a diagram to show the price floor set by the government. [2]
  - ii. Discuss the effects of the price floor on the maize market. [2]

### QUESTION 4

- a) Tawanda's favourite drink is coffee because it helps him stay alert at school. The following table shows Tawanda's total utility for each cup of coffee he drinks during a typical day. It is assumed that Tawanda is a consumer with rational behaviour:

Cups of Coffee consumed per day	Total Utility	Marginal Utility
0	0	
1	5	
2	9	
3	12	
4	14	
5	15	

- i. Copy and complete the table by calculating the marginal utility [6]
  - ii. Explain what is meant by ‘**rational behaviour**’ of consumers. [2]
- b) What is an indifference curve? [2]
- c) For Tawanda, Ricoffy and Nescafe are **perfect substitutes**; coffee and tea are **imperfect substitutes**; coffee and sugar are **perfect complements**. Draw separate indifference curves to illustrate:
- i. Ricoffy and Nescafe [2]
  - ii. Coffee and Tea [2]
  - iii. Coffee and Sugar [2]
- d) Give four properties of an indifference curve. [4]

### QUESTION 5

- a) Give one difference between Keynesian and Classical Economics. [2]
- b) Assume a closed economy with firms, the government and households. Draw and correctly label a circular flow diagram for this scenario. [8]
- c) What is the difference between Gross Domestic Product (GDP) and Gross National Product (GNP)? [2]
- d) Identify two methods of calculating GDP. [2]
- e) Giving an example from agriculture, explain what a negative externality is. [3]
- f) Discuss the role of the government in protecting the society from negative externalities. [3]