2025 END OF SEMESTER EXAMS – AGRICULTURE 2 SOLUTION

FORM TWO

QUESTION 1

a. Define production as applied in agriculture.
Production in agriculture refers to the process of creating goods and services from available resources, including crops, livestock, and other products, for consumption or sale. **(2 marks)**

b. Indicate the various factors of production.

- Land
- Labour
- Capital
- Entrepreneurship
  (2 marks)

c. Why is land considered a factor of agricultural production?
Land is considered a factor of production because it provides the space and natural resources needed for farming activities, such as soil, water, and climate, which are essential for growing crops and raising livestock. **(2 marks)**

d. State and explain three (3) characteristics of an agricultural land.

1. **Fertility**: The ability of the soil to provide essential nutrients for crop growth.
2. **Drainage**: Proper movement of water through the soil, which ensures plants get adequate moisture.
3. **Topography**: The physical features of the land, such as slope and elevation, which affect its suitability for farming.
   (6 marks)

e. Mention five (5) factors that determine the value of an agricultural land.

1. Soil fertility
2. Proximity to markets
3. Availability of water sources
4. Accessibility (roads and infrastructure)
5. Size and shape of the land
   (5 marks)

f. Mention three (3) factors that influence the supply of labour.

1. Population size
2. Education and skills level
3. Availability of alternative employment opportunities
   (3 marks)

QUESTION 2

a. Explain the concept of labour in agricultural production.
Labour in agriculture refers to the human effort, both physical and mental, used in the cultivation of crops and the rearing of animals to achieve production goals. **(2 marks)**

b. State and explain the various classes of agricultural labour.

1. **Family Labour**: Labour provided by family members without direct payment.
2. **Hired Labour**: Labour contracted on a temporary or permanent basis for wages.
3. **Communal Labour**: Labour provided by the community for mutual benefit, often voluntary.
   (3 marks)

c. Provide four (4) main sources of agricultural labour.

1. Family members
2. Hired workers
3. Cooperatives
4. Mechanized labour (using machinery)
   (2 marks)

d. How does the size of the population influence the supply of labour?
A larger population increases the potential supply of labour for agricultural activities. However, the level of education, skillset, and alternative employment opportunities can moderate this influence. **(3 marks)**

e. What is agricultural economics?
Agricultural economics is the branch of economics that focuses on the production, distribution, and consumption of agricultural goods and services, addressing issues like resource allocation, productivity, and market dynamics. **(4 marks)**

f. Indicate six (6) benefits of agricultural economics to Akua Donkor.

1. Helps in making informed decisions about resource allocation.
2. Promotes efficient use of farm inputs.
3. Guides pricing strategies for agricultural products.
4. Assists in understanding market trends and demands.
5. Provides insights into risk management.
6. Enhances profitability through strategic planning.
   (6 marks)

QUESTION 3

a. Mention three (3) economic properties of the farm.

1. Profitability
2. Productivity
3. Sustainability
   (3 marks)

b. Explain the concept of demand in agricultural economics.
Demand refers to the quantity of a product that consumers are willing and able to purchase at various prices within a given period. **(2 marks)**

c. Explain what is known as demand curve.
The demand curve is a graphical representation showing the inverse relationship between the price of a good and the quantity demanded. **(1 mark)**

d. Mention the principle/law backing demand.
The **Law of Demand**: When the price of a good decreases, its quantity demanded increases, and vice versa, assuming other factors remain constant. **(2 marks)**

e. Mention three (3) determinants of demand.

1. Price of the product
2. Consumer income
3. Tastes and preferences
   (3 marks)

f. Differentiate between change in demand and change in quantity demanded.

Change in Demand	**Change in Quantity Demanded**
Caused by non-price factors like income	Caused solely by price changes
Shifts the entire demand curve	Moves along the demand curve
Reflects a new demand level at all prices	Reflects change at a specific price
(4 marks)	

g. Calculate the price elasticity of demand.

$$Ed = \frac{\text{Percentage Change in Quantity Demanded}}{\text{Percentage Change in Price}}$$

- Price change = 220,000−190,000=30,000
- Percentage change in price = $\frac{30{,}000}{190{,}000}$×100=15.79%
- Quantity change = 6−5=16 - 5 = 1
- Percentage change in quantity = $\frac{1}{5}$×100=20%

$$Ed = \frac{20}{15.79} \approx 1.27$$

Elasticity of demand: **1.27** (elastic) **(5 marks)**

QUESTION 4

a. What is a supply schedule?
A supply schedule is a table that shows the quantity of a good that producers are willing to supply at different price levels over a specific period. **(3 marks)**

b. Indicate five (5) determinants of supply.

1. Price of the product
2. Cost of production
3. Technology
4. Government policies (taxes/subsidies)
5. Number of producers in the market
   (5 marks)

c. State the law of supply as used in economics.
The **Law of Supply**: As the price of a product increases, the quantity supplied also increases, and vice versa, assuming other factors remain constant. **(2 marks)**

d. Mention the five (5) main elasticities of supply.

1. Perfectly elastic supply
2. Perfectly inelastic supply
3. Unitary elastic supply
4. Elastic supply
5. Inelastic supply
   (5 marks)

e. What is price elasticity of supply?
Price elasticity of supply measures how responsive the quantity supplied of a good is to a change in its price. **(3 marks)**

f. How does the level of tax influence or affect supply of produce?
Higher taxes increase production costs, which may reduce the supply of goods. Conversely, tax reductions can lower costs and encourage greater supply. **(2 marks)**