

**WEEKLY HOME STUDY PACKAGE - WEEK 5 (02/08/21 – 06/08/21)**

Subject	AGRICULTURE SCIENCE	Year/Level	13
Strand	AGRONOMY		
Sub-strand	HORTICULTURE		
Content Learning Outcome	<ul style="list-style-type: none">• Describe appropriate sustainable farming methods and how it benefits the community socially, economically and environmentally.• Define urban agriculture• State the advantages and disadvantages of agriculture• Define permaculture• State the advantages of permaculture		

Solution**1. Define sustainable farming (1 mark)**

Sustainable farming is farming ecologically by promoting methods and practices that are economically viable, environmentally sound and protect public health. This contributes to the growth of nutritious and healthy food and also brings up the standard of living of the farmer

2. List two benefits for sustainable farming (2 marks)

1. Environment Preservation
2. Economic Profitability
3. Most efficient use of non-renewable resources
4. Protection of Public Health
5. Social and Economic Equity

3. Explain the difference between urban Agriculture and rural Agriculture (2 marks)

Urban Agriculture can be defined as the growing, processing, and distribution of food and other products through plant cultivation and occasionally raising livestock in and around cities for feeding local populations whereas rural agriculture is carrying out farming in large areas away from towns and cities. These farming include production of commodities in large scale where lots of space is required. For eg. Livestock farming, sugarcane farming.

4. State two advantages and two disadvantages of urban Agriculture (4 marks)**Advantages of Urban Agriculture**

- ❖ Contributes to food security, nutrition and livelihoods in a combination of ways.
- ❖ Provides for family self-consumption, thus contributing to healthy diet and saves money.
- ❖ Provides a source of income, through sale of surplus or specialized and commercial production systems
- ❖ Creates community bonds and social interaction, and is valuable as a relaxing physical activity in more developed areas.

Disadvantages of Urban Agriculture

- The use of waste water for irrigation without careful treatment and monitoring can result in the spread of diseases among the population.

- Cultivation on contaminated land also represents a health hazard for the consumers.
- The practice of cultivating along roadsides is a risky practice since it exposes food to car pollution.
Agriculture and urbanization competes for the access and use of limited land.

5. Define Permaculture

(1 mark)

Permaculture is an innovative framework for creating sustainable ways of living. It is basically about going back to the traditional method of farming, incorporating the features of organic farming, agro-forestry, sustainable development, and applied ecology.

6. List and explain two advantages of permaculture

(2 marks)

- 1. Reduced Cost** - Using all the natural components of the ecosystem like composting the waste into useful organic matter and manure, farmers save up a lot of money.
- 2. Less Waste** - Waste products are recycled and manure back to the earth in the form of compost.
- 3. Chemical Resistance**- Natural fertilizers and mulch are used for farming and gardening.
- 4. Less Pollution** - It is a natural way of agricultural cultivation thus pollution is reduced.

7. Explain how the Zoning is an advantage in relation to Permaculture farming (2 marks)

Zoning - Zoning means arranging the produce depending on what ripens first and what needs more attention. The ripe fruits and vegetables are harvested first and the latter ones, as and when they ripen.

8. List one disadvantage of Permaculture

(1 mark)

- More pest and disease will affect the crops thus control for pests will be difficult.
- Lack of space for movement as plants will not have enough space for growth and obtain nutrients.
- More care is required by the farmers while carrying this type of farming to prevent damage of crops.