

**NAME: KEREN OMOLAYO OLUBIYO**

**REG. NO.: CSSL/2023/53**

**CLASS: JS 1 EMERALD**

**SUBJECT: AGRICULTURAL SCIENCE**

## **QUESTION 1A**

### **1. Annual Crops:**

- **Lifespan:** One year or growing season.
- **Characteristics:** These crops complete their life cycle within one year. They are usually planted, grow, produce seeds, and die in a single growing season.
- **Examples:** Corn, wheat, rice, soybeans, peas, and most vegetables like tomatoes, lettuce, and beans.

### **2. Biennial Crops:**

- **Lifespan:** Two years.
- **Characteristics:** These crops take two growing seasons to complete their life cycle. In the first year, they usually grow vegetatively (leaves, stems) without producing seeds. In the second year, they produce flowers, seeds, and then die.
- **Examples:** Carrots, onions, sugar beets, and some types of herbs like parsley and celery.

### 3. Perennial Crops:

- **Lifespan:** More than two years.
- **Characteristics:** These crops can live and produce for several years. After they are planted, they can produce multiple harvests without replanting each year.
- **Examples:** Fruit trees (apple, peach, cherry, etc.), berries (strawberries, blueberries), grapes, asparagus, and many herbs like mint, thyme, and rosemary.

Understanding the lifespan of crops is essential for farmers as it helps them plan crop rotations, manage field fertility, and optimize land use.

### QUESTION 1B

Crops can be classified based on their uses and the nature of the produce they yield. Here's a breakdown:

#### 1. Tubers/Root Crops:

- **Nature of Produce:** Edible underground storage organs.
- **Examples:** Potatoes, sweet potatoes, yams, cassava, and beets.

#### 2. Cereals:

- **Nature of Produce:** Edible grains that can be milled into flour or used whole.
- **Examples:** Wheat, rice, maize (corn), barley, oats, rye, and millet.

### **3. Fruits:**

- Nature of Produce: Edible reproductive parts of flowering plants, often containing seeds.
- Examples: Apples, oranges, bananas, grapes, strawberries, mangoes, and pineapples.

### **4. Vegetables:**

- Nature of Produce: Edible parts of plants that are not fruit or seeds.
- Examples: Tomatoes, lettuce, carrots, broccoli, spinach, cucumbers, and bell peppers.

### **5. Oil Crops:**

- Nature of Produce: Crops grown primarily for the oil contained within their seeds or fruits.
- Examples: Soybeans (for soybean oil), sunflower (for sunflower oil), rapeseed (for canola oil), and palm fruits (for palm oil).

### **6. Spices:**

- Nature of Produce: Plant substances used for flavoring, coloring, or preserving food.
- Examples: Black pepper, cinnamon, turmeric, ginger, cloves, nutmeg, and cardamom.

### **7. Latex Crops:**

- Nature of Produce: Crops from which latex, a milky fluid, can be extracted.

- Examples: Rubber trees (for natural rubber latex), and chicle (used in chewing gum).

## **8. Beverages:**

- Nature of Produce: Crops primarily used for making drinks.
- Examples: Coffee beans, tea leaves (from the *Camellia sinensis* plant), cacao beans (for chocolate and cocoa), and grapes (for wine).

Understanding the type and use of crops is vital for agricultural planning, marketing, and ensuring food security. Different crops have distinct requirements for cultivation, harvesting, and processing.

## **QUESTION 2**

Farm animals serve various purposes on agricultural operations, and they can be classified based on their primary function or utility. Here's a discussion on the classification you provided:

### **1. Work Animals:**

- Primary Function: Used for labor-intensive tasks on farms.
- Examples:
  - Horses and Mules: Historically, they were crucial for plowing fields, pulling carts, and transporting goods.
  - Oxen: Used for plowing, pulling heavy loads, and as a source of meat.
  - Donkeys: Used for carrying loads, especially in terrains where wheeled vehicles are impractical.

## **2. Dairy Animals:**

- Primary Function: Raised primarily for milk production.
- Examples:
  - Cows: The most common dairy animals worldwide, producing milk that is consumed directly or processed into various dairy products like cheese, butter, and yogurt.
  - Goats: Particularly in some regions, goats are raised for milk production, which is used for drinking or making cheese and other dairy products.
  - Buffaloes: Especially in parts of Asia, buffaloes are raised for their high-fat content milk, used in various dairy products.

## **3. Guard Animals:**

- Primary Function: Protecting livestock and property from predators.
- Examples:
  - Dogs: Breeds like the Great Pyrenees, Anatolian Shepherd, and Maremma Sheepdog are commonly used to guard livestock against predators such as wolves and coyotes.
  - Llamas and Alpacas: These South American camelids are used in some regions to guard sheep and goats from predators due to their territorial nature and alertness.

#### **4. Poultry:**

- Primary Function: Raised primarily for their meat and eggs.
- Examples:
  - Chickens: The most common poultry worldwide, raised for both meat (broilers) and eggs.
  - Ducks: Raised for meat, eggs, and sometimes for their down feathers.
  - Turkeys: Primarily raised for meat, especially during festive occasions.

#### **5. Aquatic Animals:**

- Primary Function: Raised in aquatic environments (like ponds or tanks) for consumption or other products.
- Examples:
  - Fish: Species like tilapia, salmon, carp, and catfish are commonly raised in aquaculture systems for human consumption.
  - Shrimp and Prawns: Especially in coastal regions, these crustaceans are raised in aquaculture ponds or tanks.
  - Mollusks: Includes creatures like oysters, clams, and mussels, which are often cultivated for their meat.