

**Subject: Agricultural Science**

**Class: JSS1**

**Term: First Term**

**Week 7**

**Topic: Crop Plant Forms**

**Sub-Topic:**

- Different Parts of a Plant
  - Functions of the Shoot
  - Functions of the Leaves
  - Functions of the Roots
  - Functions of the Flowers
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### **Lesson Objectives**

By the end of the lesson, students should be able to:

1. Identify the different parts of a typical crop plant.
  2. Describe the functions of the **shoot, leaves, roots, and flowers**.
  3. Explain the role of each plant part in the growth and survival of the plant.
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### **I. Different Parts of a Crop Plant**

A typical crop plant is made up of **two main systems**:

#### **1. Root System**

- Found **below the ground**
- Anchors the plant and absorbs water and minerals

#### **2. Shoot System**

- Found **above the ground**
- Includes the **stem, leaves, flowers, and fruits**

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## II. Main Parts and Their Functions

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### 1. The Root

#### Types of Roots

- **Tap root** – One main root with smaller side roots (e.g., carrot, beans)
- **Fibrous root** – Many thin roots spreading out (e.g., maize, rice)

#### Functions of Roots

- Anchors the plant firmly in the soil
  - Absorbs water and mineral salts
  - Stores food (in plants like yam, cassava, carrot)
  - Helps in vegetative reproduction (e.g., sweet potato)
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### 2. The Shoot / Stem

The **stem** is the central part of the shoot system.

#### Functions of the Stem

- Supports the plant and holds up leaves, flowers, and fruits
  - Transports water and nutrients from roots to other parts
  - Carries food from the leaves to other parts of the plant
  - Stores food in some plants (e.g., sugarcane)
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### 3. The Leaves

Leaves are flat and green parts of the plant attached to the stem.

#### Functions of Leaves

- **Photosynthesis:** Leaves use sunlight to make food for the plant
- **Transpiration:** Leaves lose water vapor, helping cool the plant

- **Respiration:** Leaves exchange gases with the atmosphere
  - Store food in some plants (e.g., cabbage, spinach)
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#### 4. The Flowers

Flowers are the **reproductive part** of the plant. They are often colorful and fragrant.

##### Functions of Flowers

- Helps in **reproduction** by producing seeds and fruits
  - Attracts insects and birds that help with **pollination**
  - Develops into fruits and seeds after fertilization
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#### Quick Recap Table

##### Part of Plant Main Function(s)

<b>Root</b>	Anchoring, absorbing water/nutrients, storing food
<b>Stem</b>	Support, transport of water/food, food storage
<b>Leaves</b>	Food production, transpiration, gas exchange
<b>Flowers</b>	Reproduction, pollination, seed formation