

Class 7 Biology – [SYLLABUS FOR 2026-2027](#)

**MID TERM 1**

[months : APRIL-JUNE END]

CH- PLANT TISSUE

CH-ANIMAL TISSUE

• **Half Yearly: MT1 + new chapters [ JUNE- SEPT]**

CH-PHOTOSYNTHESIS

CH-RESPIRATION

CH-ALLERGY

CH- PLANT TISSUE

CH- ANIMAL TISSUE

• **MT2: [ DECEMBER]**

CH -CLASSIFICATION OF LIVING WORLD

• **Fina: Primarily new chapters (70–80%) + 20–30% application from earlier topics**

CH-CLASSIFICATION OF ANIMALS

CH-HUMAN EXCRETORY SYSTEM

CH-HUMAN NERVOUS SYSTEM

CH -CLASSIFICATION OF LIVING WORLD

✨ For Final Term

70–80% → New chapters

20–30% → Application-based questions from old chapters

## **PLANT TISSUE**

### **1. Knowledge & Understanding (LOTS)**

- Identify different types of plant tissues
- Describe structure and location

### **2. Application [MOTS]**

- Relate structure of tissues to their function
- Explain how tissues help plants survive in different environments

### **3. Analysis[HOTS]**

- Differentiate between simple and complex tissues
- Compare xylem and phloem based on structure and function

### **4. Skill-Based Learning [HOTS]**

- Observe slides/diagrams and identify tissues
- Label and interpret diagrams

## 5. Real-Life Connection

- Explain role of vascular tissues in transport of water in plants
- Connect tissue function to agriculture (e.g., crop health)

## Animal Tissues

### 1. Knowledge & Understanding (LOTS)

- Identify types of animal tissues: epithelial, connective, muscular, nervous
- Describe structure, location, and basic function of each tissue
- Name subtypes (e.g., squamous epithelium, blood, cartilage, striated muscle)

### 2. Application (MOTS)

- Relate structure to function (e.g., flat cells → diffusion in epithelium)
- Explain how tissues help in protection, movement, transport, coordination

### 3. Analysis (HOTS)

- Differentiate between plant and animal tissues
- Compare types of muscle tissues (striated, smooth, cardiac)
- Compare epithelial vs connective tissues

### 4. Skill-Based Learning (HOTS)

- Identify tissues from diagrams/slides
- Label parts (neuron, muscle fibre, blood cells)
- Interpret diagrams

### 5. Real-Life Connection

- Role of blood in transport
- Importance of muscle tissues in movement
- Nerve tissue in reflex actions

## Photosynthesis

### 1. Knowledge & Understanding (LOTS)

- Define photosynthesis
- Identify raw materials (CO<sub>2</sub>, water), products (glucose, oxygen)
- Describe role of chlorophyll and sunlight
- State equation of photosynthesis

### 2. Application (MOTS)

- Explain role of stomata in gas exchange
- Relate leaf structure to photosynthesis
- Explain factors affecting photosynthesis (light, CO<sub>2</sub>, water)

### 3. Analysis (HOTS)

- Compare photosynthesis and respiration
- Analyze importance of light and dark reactions (basic level)
- Differentiate autotrophic and heterotrophic nutrition
- 4. Skill-Based Learning (HOTS)
- Label leaf diagram (stomata, chloroplast)
- Interpret experiment setups (starch test, iodine test)
- Identify parts involved in photosynthesis

### 5. Real-Life Connection

- Importance of photosynthesis for food chain
- Oxygen supply for living organisms
- Role in agriculture productivity

## **Respiration in Plants**

### 1. Knowledge & Understanding (LOTS)

- Define respiration
- Identify raw materials and products
- Describe aerobic and anaerobic respiration

### 2. Application (MOTS)

- Explain gas exchange in plants (stomata, lenticels)
- Relate respiration to energy needs
- Explain respiration in roots, stems, leaves

### 3. Analysis (HOTS)

- Compare respiration and photosynthesis
- Differentiate aerobic and anaerobic respiration
- Analyze importance of oxygen

### 4. Skill-Based Learning (HOTS)

- Interpret diagrams of gas exchange
- Identify plant parts involved
- Analyze simple experiments

### 5. Real-Life Connection

- Importance of respiration for plant survival

- Storage of crops and respiration rate
- Fermentation (basic idea)

## **CH – Allergy**

- **1. Knowledge & Understanding (LOTS)**
- Define allergy and identify common allergens (dust, pollen, food, chemicals)
- Describe basic concept of immune response and hypersensitivity
- **2. Application (MOTS)**
- Relate allergens to symptoms (sneezing, rashes, breathing difficulty)
- Suggest preventive measures to avoid allergic reactions
- **3. Analysis (HOTS)**
- Differentiate between allergy and infection
- Compare different types of allergies (respiratory, skin, food)
- **4. Skill-Based Learning (HOTS)**
- Identify allergens and symptoms from given cases/diagrams
- Interpret simple charts showing allergic reactions
- **5. Real-Life Connection**
- Awareness of common allergies in daily life
- Importance of hygiene and avoiding triggers for better health
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## **MID TERM 2**

### **CH – Classification of Living World**

#### **Knowledge & Understanding (LOTS)**

- Identify major groups (plants, animals, microorganisms) and basic classification criteria
- Define classification and understand basis like cell type, habitat, and nutrition

#### **2. Application (MOTS)**

- Classify organisms based on given characteristics
- Relate features (unicellular/multicellular) to grouping

#### **3. Analysis (HOTS)**

- Differentiate between plants and animals based on key features
- Compare different groups of organisms (e.g., microorganisms vs higher organisms)

#### **Skill-Based Learning (HOTS)**

- Identify organisms from diagrams/pictures
- Arrange organisms into correct groups based on features

#### **5. Real-Life Connection**

- Importance of classification in studying biodiversity

- Use of classification in agriculture and environmental studies

## FINAL ASSESSMENT +MT2 + APPLICATION BASED 20% FROM HYA

### CH – Classification of Animals

#### 1. Knowledge & Understanding (LOTS)

- Identify major groups: vertebrates and invertebrates
- Describe basic features of animal groups (habitat, body structure)

#### 2. Application (MOTS)

- Classify animals based on characteristics like backbone, habitat
- Relate body structure to movement and survival

#### 3. Analysis (HOTS)

- Differentiate vertebrates and invertebrates
- Compare classes of vertebrates (fish, amphibians, reptiles, birds, mammals)

#### 4. Skill-Based Learning (HOTS)

- Identify animals from diagrams/images
- Label features like fins, wings, limbs

#### 5. Real-Life Connection

- Importance of animals in ecosystem balance
- Role of classification in understanding animal diversity

### CH – Human Excretory System

#### 1. Knowledge & Understanding (LOTS)

- Identify organs: kidneys, ureters, urinary bladder, urethra
- Describe structure of kidney and nephron

#### 2. Application (MOTS)

- Explain basic steps of urine formation
- Relate nephron structure to filtration function

#### 3. Analysis (HOTS)

- Differentiate excretion and egestion
- Compare filtration and reabsorption processes

#### Skill-Based Learning (HOTS)

- Label diagram of kidney and nephron
- Identify flow of urine formation in diagrams

#### 5. Real-Life Connection

- Importance of kidney health and water intake
- Basic idea of dialysis in kidney failure

### CH – Human Nervous System

#### 1. Knowledge & Understanding (LOTS)

- Identify parts: brain, spinal cord, nerves

- Describe structure of neuron

## **2. Application (MOTS)**

- Explain transmission of nerve impulses (basic)
- Relate neuron structure to its function

## **3. Analysis (HOTS)**

- Differentiate central and peripheral nervous system
- Compare voluntary and involuntary actions

## **4. Skill-Based Learning (HOTS)**

- Label neuron and brain diagrams
- Identify parts involved in reflex action

## **5. Real-Life Connection**

- Importance of reflex actions in daily life
- Role of nervous system in coordination and control