



**GENRES LEARNING**

Live E-Learning Portal



---

**CLASS 7  
SCIENCE  
SYLLABUS  
2022-23**

---



**GENRES LEARNING**

<https://www.genreslearning.in>

# SYLLABUS

## CHAPTER-1: NUTRITION IN PLANTS

- 1.1. Mode of Nutrition in Plants
- 1.2. Photosynthesis — Food Making Process in Plants
  - Synthesis of Plant Food Other Than Carbohydrates
- 1.3. Other Modes of Nutrition in Plants
- 1.4. Saprotrophs
- 1.5. How Nutrients Are Replenished in The Soil

## CHAPTER-2: NUTRITION IN ANIMALS

- 2.1 Different Ways of Taking Food
- 2.2 Digestion in Humans
  - The Mouth and Buccal Cavity
  - The Food Pipe/Oesophagus
  - The Stomach
  - The Small Intestine
  - Absorption in The Small Intestine
  - Large Intestine
- 2.3 Digestion in Grass-Eating Animals
- 2.4 Feeding and Digestion in Amoeba

## CHAPTER-3: FIBRE TO FABRIC

- 3.1
  - ❖ Animal Fibres — Wool and Silk
  - Wool
  - ❖ Animals That Yield Wool
  - ❖ From Fibres to Wool
  - ❖ Processing Fibres into Wool
- 3.2
  - Silk
  - ❖ Life History of Silk Moth
  - ❖ From Cocoon to Silk

## CHAPTER-4: HEAT

- 4.1 Hot and Cold
- 4.2 Measuring Temperature
  - 4.2.1. Reading A Thermometer
- 4.3 Laboratory Thermometer
- 4.4 Transfer of Heat
- 4.5 Kinds of Clothes We Wear in Summer and Winter
  - Woollen Clothes Keep Us Warm in Winter

**CHAPTER-5: ACIDS, BASES AND SALTS**

- 5.1 Acids and Bases
- 5.2 Natural Indicators Around Us
  - Litmus: A Natural Dye
  - Turmeric Is Another Natural Indicator
  - China Rose as Indicator
- 5.3 Neutralisation
- 5.4 Neutralisation in Everyday Life
  - Indigestion
  - Ant Bite
  - Soil Treatment
  - Factory Wastes

**CHAPTER-6: PHYSICAL AND CHEMICAL CHANGES**

- 6.1. Physical Changes
- 6.2. Chemical Change
- 6.3. Rusting of Iron
- 6.4. Crystallisation

**CHAPTER-7: WEATHER, CLIMATE AND ADAPTATIONS OF ANIMALS TO CLIMATE**

- 7.1 Weather
- 7.2 Climate
- 7.3 Climate and Adaptation
  - I The Polar Regions
  - II The Tropical Rainforests

**CHAPTER-8: Winds, Storms and Cyclones**

- 8.1 Air Exerts Pressure
- 8.2 High Speed Winds Are Accompanied by Reduced Air Pressure
- 8.3 Air Expands on Heating
- 8.4 Wind Currents Are Generated Due to Uneven Heating on The Earth
  - (a) Uneven Heating Between the Equator and The Poles
  - (b) Uneven Heating of Land and Water
- 8.5 Thunderstorms and Cyclones
  - How A Thunderstorm Becomes A Cyclone
- 8.6 Destruction Caused by Cyclones
- 8.7 Effective Safety Measures
  - Action on The Part of The People
- 8.8 Advanced Technology Has Helped

**CHAPTER-9: SOIL**

- 9.1. Soil Teeming with Life
- 9.2. Soil Profile
- 9.3. Soil Types
- 9.4. Properties of Soil
  - Percolation Rate of Water in Soil
- 9.5. Moisture in Soil
- 9.6. Absorption of Water by Soil
- 9.7. Soil and Crops

**CHAPTER-10: RESPIRATION IN ORGANISMS**

- 10.1 Why Do We Breathe?
- 10.2 Breathing
- 10.3 How Do We Breathe?
- 10.4 What Do We Breathe Out?
- 10.5 Breathing in Other Animals
- 10.6 Breathing Under Water
- 10.7 Do Plants Also Breathe?

**CHAPTER-11: TRANSPORTATION IN ANIMALS AND PLANTS**

- 18.1. Circulatory System
  - Blood
  - Blood Vessels
  - Heart
  - Heartbeat
- 18.2. Excretion in Animals
  - Excretory System in Humans
- 18.3. Transport of Substances in Plants
  - Transport of Water and Minerals
  - Transpiration

**CHAPTER-12: REPRODUCTION IN PLANTS**

- 12.1 Modes of Reproduction
  - Asexual Reproduction
  - Vegetative Propagation
  - Budding
  - Fragmentation
  - Spore Formation
- 12.2 Sexual Reproduction
  - Pollination
  - Fertilisation
- 12.3 Fruits and Seed Formation
- 12.4 Seed Dispersal

**CHAPTER-13: MOTION AND TIME**

- 13.1 Slow and Fast
- 13.2 Speed
- 13.3 Measurement of Time
  - Units of Time and Speed
- 13.4 Measuring Speed
- 13.5 Distance-Time Graph

**CHAPTER-14: ELECTRIC CURRENT AND ITS EFFECTS**

- 14.1 Symbols of Electric Components
- 14.2 Heating Effect of Electric Current
- 14.3 Magnetic Effect of Electric Current
- 14.4 Electromagnet
- 14.5 Electric Bell

**CHAPTER-15: LIGHT**

- 15.1. Light Travels Along A Straight Line
- 15.2. Reflection of Light
- 15.3. Right or Left!
- 15.4. Playing with Spherical Mirrors
- 15.5. Images Formed by Lenses
- 15.6. Sunlight — White or Coloured?

**CHAPTER-16: WATER: A PRECIOUS RESOURCE**

- 16.1. How Much Water Is Available
- 16.2. Forms of Water
- 16.3. Groundwater as An Important Source of Water
- 16.4. Depletion of Water Table
  - Increasing Population
  - Increasing Industries
  - Agricultural Activities
- 16.5. Distribution of Water
- 16.6. Water Management
- 16.7. What Role You Can Play
- 16.8. Effect of Water Scarcity on Plants

**CHAPTER-17: FORESTS: OUR LIFELINE**

- 17.1. Visit to A Forest

## CHAPTER-18: WASTEWATER STORY

- 18.1. Water, Our Lifeline
- 18.2. What Is Sewage?
- 18.3. Water Freshens Up — An Eventful Journey
  - Treatment of Polluted Water
- 18.4. Forms of Water Wastewater Treatment Plant (WWTP)
  - Become an Active Citizen
- 18.5. Better Housekeeping Practices
- 18.6. Sanitation and Disease
- 18.7. Alternative Arrangement for Sewage Disposal
- 18.8. Sanitation at Public Places
- 18.9. Conclusion



GENRES LEARNING

Website: <https://genreslearning.in>

Email at: [info@genreslearning.in](mailto:info@genreslearning.in)