

# **SCIENCE SYLLABUS**

## **Class – 7**

### **7<sup>th</sup> Class Science Syllabus – An Overview**

Syllabus for Class 7 Science is designed to provide a foundational understanding of various scientific principles. It is divided into three broad sections: Physics, Chemistry, and Biology. Here's a detailed breakdown of the topics and sub-topics covered in the Class 7 Science syllabus:

**Here our chapters for ITSE Examination :-**

***Chapter 1. Motion and Time***

***Chapter 2. Electric Current and Its effects***

***Chapter 3. Acids , Bases and Salts***

***Chapter 4. Water***

***Chapter 5. Fibre to Fabric***

***Chapter 6. Nutrition in Animals***

***Chapter 7. Weather, Climate, and Adaptations of Animals to Climate***

***Chapter 8. Reproduction in Plants***

***Chapter 9. Transportation in Animals and Plants***

***Chapter 10. Respiration in Organisms***

***Chapter 11. Nutrition in Plants***

***Chapter 12. Soil***

***Chapter 13. Physical and Chemical Changes***

**Chapter 14. Heat**

**Chapter 15. Winds, Storms, and Cyclones**

**Chapter 16. Light**

## **Chapter - 1 (Motion and Time )**

### **Topics and Sub- Topics:**

- Understanding Speed
- Measurement of Time
- Measuring Speed

## **Chapter - 2 (Electric Current and Its effects)**

### **Topics and Sub-topics:**

- Symbols of Electric Components.
- Heating Effect of Electric Current.
- Magnetic Effect of Electric Current.
- Electric Bell

## **Chapter - 3 (Acids , Bases and Salts)**

### **Topics and Sub-topics:**

- Acids and their Properties
- Bases and their Properties
- Neutralization Reaction
- Use of Indicators

## **Chapter – 4 (Water)**

### **Topics and Sub-topics:**

- Availability of Water.
- Importance of Water Conservation.
- Groundwater and Its Overuse.
- Water Cycle

## **Chapter - 5 ( Fibre to Fabric )**

### **Topics and Sub-topics:**

- Animal Fibres: Wool and Silk.
- Processing of Wool
- Life Cycle of Silk Moth

## **Chapter - 6 ( Nutrition in Animals )**

### **Topics and Sub-topics:**

- Different Modes of Feeding
- Human Digestive System
- Digestion in Grass-Eating Animals

## **Chapter – 7 ( Weather, Climate, and Adaptations of Animals to Climate)**

### **Topics and Sub-topics:**

- Weather and Climate
- Climate and Adaptations in Animals
- Effects of Climate Change

## **Chapter - 8 (Reproduction in Plants)**

### **Topics and Sub-topics:**

- Modes of Reproduction in Plants
- Sexual and Asexual Reproduction
- Seed Dispersal

## **Chapter - 9 (Transportation in Animals and Plants )**

### **Topics and Sub-topics:**

- Circulatory System in Humans
- Blood Vessels and Heart
- Excretory System in Humans
- Transport in Plants: Xylem and Phloem

## **Chapter - 10 (Respiration in Organisms)**

### **Topics and Sub-topics:**

- Respiration in Humans
- Breathing and Its Mechanism
- Respiration in Animals and Plants

## **Chapter - 11 (Nutrition in Plants)**

### **Topics and Sub-topics:**

- Modes of Nutrition in Plants

- Photosynthesis
- Other Modes of Nutrition in Plants
- Saprotrophs and Parasites

## **Chapter - 12 ( Soil )**

### **Topics and Sub-topics:**

- Formation of Soil
- Soil Profile and Horizons
- Soil Types and Properties
- Soil Erosion and Conservation

## **Chapter - 13 (Physical and Chemical Changes)**

### **Topics and Sub-topics:**

- Physical Changes
- Chemical Changes
- Rusting of Iron
- Crystallization

## **Chapter - 14 ( Heat )**

### **Topics and Sub-topics:**

- Temperature and Heat
- Modes of Heat Transfer: Conduction, Convection, Radiation
- Sea Breeze and Land Breeze

## **Chapter – 15 ( Winds, Storms, and Cyclones )**

### **Topics and Sub-topics:**

- Air Pressure and Wind
- Thunderstorms and Cyclones
- Safety Measures during Cyclones

## **Chapter – 16 ( Light )**

### **Topics and Sub-topics:**

- Light Travels in a Straight Line
- Reflection of Light
- Plane Mirror and Lateral Inversion
- Regular and Diffused Reflection

- Reflected Light and Image Formation
- Dispersion of Light