SCIENCE SYLLABUS

Class – 5

5th Class Science Syllabus – An Overview

Syllabus for Class 5 Science covers a range of topics designed to give students a fundamental understanding of various scientific concepts. The curriculum is designed to be engaging and includes a variety of topics that integrate theory with practical knowledge.

Here our chapters for ITSE Examination :-

Chapter - 1 (Plants and Animals)

Topics and Sub- Topics:

- **Parts of Plants:** Roots, stems, leaves, flowers, and their functions.
- **Photosynthesis:** Process, importance, and factors affecting it.

- **Types of Plants:** Herbs, shrubs, trees, climbers, and creepers.
- **Reproduction in Plants:** Seeds, dispersal methods, and growth.
- **Animals and Their Habitats:** Classification based on habitats (terrestrial, aquatic, aerial, arboreal).
- **Adaptations in Animals:** Structural and behavioural adaptations for survival.
- **Life Cycles of Animals:** Growth stages of different animals (e.g., butterfly, frog).

Chapter - 2 (Matter and Minerals)

Topics and Sub-topics:

- **States of Matter:** Solids, liquids, gases, and their properties.
- **Changes in States of Matter:** Melting, freezing, evaporation, and condensation.
- **Types of Materials:** Natural and man-made materials and their uses.
- **Properties of Materials:** Strength, flexibility, transparency, and conductivity.

Chapter - 3 (Force , Work and Energy)

Topics and Sub-topics:

- **Types of Forces:** Push and pull, gravity, friction, and magnetic force.
- **Work and Simple Machines:** Definition of work, introduction to simple machines (lever, pulley, wheel and axle, inclined plane, wedge, screw).
- **Energy:** Types of energy (light, heat, sound, electrical, kinetic, and potential energy).

Chapter – 4 (Human Body and Health)

Topics and Sub-topics:

- **Human Organ Systems:** Basic introduction to the digestive, respiratory, circulatory, and nervous systems.
- **Healthy Habits:** Importance of balanced diet, exercise, hygiene, and sleep.
- **Diseases and Prevention:** Common diseases, their causes, and preventive measures (focus on hygiene and vaccines).

Chapter - 5 (Food and Nutrition)

Topics and Sub-topics:

- **Sources of Food:** Plant and animal sources.
- **Components of Food:** Carbohydrates, proteins, fats, vitamins, minerals, and water.
- **Balanced Diet:** Importance of a balanced diet and examples.
- **Food Preservation:** Methods to preserve food (drying, freezing, canning).

Chapter - 6 (Earth and its Environment)

Topics and Sub-topics:

- **Layers of the Earth:** Crust, mantle, core.
- **Rocks and Minerals:** Types of rocks (igneous, sedimentary, metamorphic), uses of minerals.
- **Natural Resources:** Renewable and non-renewable resources, conservation methods.

- **Water Cycle:** Processes of evaporation, condensation, precipitation, and collection.
- **Weather and Climate:** Difference between weather and climate, factors affecting weather.

Chapter – 7 (Our Universe)

Topics and Sub-topics:

- **The Solar System:** Planets, moons, asteroids, comets, and the sun.
- **Phases of the Moon:** New moon, full moon, waxing and waning phases.
- **Stars and Constellations:** Introduction to stars, major constellations.
- **Earth's Movements:** Rotation and revolution, and their effects on day and night, and seasons.

Chapter - 8 (Air and Water)

Topics and Sub-topics:

- **Composition of Air:** Major gases in air, properties of air.
- **Uses of Air:** Importance in respiration, combustion, and plant life.
- **Water Properties:** States of water, properties, importance of clean water.
- **Water Purification:** Methods of purifying water (boiling, filtration, sedimentation).