

SYLLABUS

CLASS X (TERM - II)

Theme: Materials

Unit I: Chemical Substances - Nature and Behaviour

Chapter – 4 Carbon and its compounds

Carbon compounds: Covalent bonding in carbon compounds. Versatile nature of carbon. Homologous series.

Chapter – 5 Periodic classification of elements

Periodic classification of elements: Need for classification, early attempts at classification of elements (Dobereiner's Triads, Newland's Law of Octaves, Mendeleev's Periodic Table), Modern periodic table, gradation in properties, valency, atomic number, metallic and non-metallic properties.

Theme: The World of the Living

Unit II: World of Living

Chapter – 8 How do organisms reproduce?

Reproduction: Reproduction in animals and plants (asexual and sexual) reproductive health-need and methods of family planning. Safe sex vs HIV/AIDS. Child bearing and women's health.

Chapter – 9 Heredity and Evolution

Heredity: Heredity; Mendel's contribution- Laws for inheritance of traits: Sex determination: brief introduction;

Theme: Natural Phenomena

Unit IV: Effects of Current

Chapter – 12 Electricity

Ohm's law; Resistance, Resistivity. Factors on which the resistance of a conductor depends. Series combination of resistors, parallel combination of resistors and its applications in daily life. Heating effect of electric current and its applications in daily life. Electric power, Interrelation between P, V, I and R.

Chapter – 13 Magnetic effects of current

Magnetic effects of current: Magnetic field, field lines, field due to a current carrying conductor, field due to current carrying coil or solenoid; Force on current carrying conductor, Fleming's Left Hand Rule, Electric Motor, Electromagnetic induction. Induced potential difference, Induced current. Fleming's Right Hand Rule.

Theme: Natural Resources

Unit V: Natural Resources

Chapter – 15 Our Environment

Our environment: Eco-system, Environmental problems, Ozone depletion, waste production and their solutions. Biodegradable and non-biodegradable substances.