

KVPY SX syllabus

SX stream is for Class XII students. The syllabus includes topics from Class X, Class XI and Class XII.

Physics Syllabus

Alternating current
Calorimetry and thermal expansion
Capacitance
Centre of mass
Circular Motion
Current electricity
Elasticity and viscosity
Electromagnetic induction
Electromagnetic waves
Electrostatics
Fluid mechanics
Friction
Geometrical optics
Gravitation
Heat transfer
Kinetic theory of gases and thermodynamics

Magnetic effect of current & magnetic force on charge or current

Measurement error and experiment

Modern physics-I

Newton's law of motion

Nuclear physics

Projectile motion

Rectilinear motion

Relative motion

Rigid body dynamics

Semiconductors

Simple harmonic motion

Sound waves

Surface Tension

Unit and dimension

Wave on a string

Wave optics

Work, Power and Energy

Chemistry Syllabus

Alcohols
Aldehydes and ketones & carboxylic acid
Aromatic Compounds
Atomic structure
Basic concepts of chemistry
Biomolecules and polymers
Chemical bonding
Chemical equilibrium
Coordination compounds
d & f block
Electrochemistry
ethers
Gaseous state
Haloalkanes and haloarenes
Hydrocarbon (Alkane, Alkene & Alkyne)
Ionic equilibrium
Kinetics
Nitrogen compounds
Organic chemistry basic principle

p-block

Periodicity

phenols

Qualitative Analysis

Redox

s-block

Solid-state

Solutions

Stereoisomerism

Surface chemistry Metallurgy

Thermodynamics

Biology Syllabus

Biology and Human Welfare

Cell: Structure and Function

Control and Coordination in Animals and Plants
--

Diversity of Living Organisms

Ecology and Environment

Genetics and Evolution

Human Physiology

Life Processes

Plant Physiology

Reproduction

Mathematics Syllabus

Trigonometric Functions

Geometry

Linear Programming

Vectors and 3D Geometry

Calculus

Relations and Functions

Coordinate Geometry

Mathematical Reasoning

Real Number

Polynomials

Introduction to Trigonometry

Surface Areas and Volumes

Statistics and Quadratic Equations

Probability

Statistics and Probability
