

KVPY SB syllabus

This test is meant for students in the 1st year of the UG course. The syllabus includes topics from Class X, Class XI, Class XII and 1st year of college.

Mathematics syllabus

Polynomials
Analytical geometry in two dimension
Calculus
Coordinate Geometry
Evaluation of integrals
Geometry
Introduction to Trigonometry
Linear Programming
Mathematical Reasoning
Probability
Real Number
Relations and Functions
Statistics and Probability
Statistics and Quadratic Equations
Surface Areas and Volumes
Trigonometric Functions

Vector Algebra

Vectors and 3D Geometry

Biology Syllabus

Biology and Human Welfare

Cell: Structure and Function

Control and Coordination in Animals and Plants
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Diversity of Living Organisms

Ecology and Environment

Genetics and Evolution

Human Physiology

Life Processes

Plant Physiology

Reproduction

Our Environment

Biotechnology

Genetics

Chemistry Syllabus

Alcohols

Aldehydes and ketones & carboxylic acid

Alkenes

Alkynes

Aromatic Compounds

Atomic structure

Basic concepts of chemistry

Biomolecules and polymers

Chemical bonding

Chemical equilibrium

Chemistry of Noble Gases

Coordination compounds

Cycloalkenes

d & f block

Dienes

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

Structure and bonding

Surface chemistry Metallurgy

Thermodynamics

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

Electricity and Magnetism

Thermal physics