

## KVPY SA Syllabus

Students who have completed the Class X examination with 75% (65% for SC/ST/PWD) aggregate marks in mathematics and science subjects and have enrolled in Class XI can appear for stream SA. The syllabus includes topics from Class X and Class XI. The syllabus given below is based on the questions from the previous years.

### Physics Syllabus

Alternating Current
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Current Electricity
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Electromagnetic Induction
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Electrostatics
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Gravity
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Kinematics
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Laws of motion
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Magnetic effects of current
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Physical-world and measurement
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Reflection of light
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Refraction
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Source of energy
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Thermodynamics
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Work, energy and power
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## Chemistry Syllabus

Acids
Basic concepts of chemistry
Environmental Chemistry
Chemical reactions
Metals and non-metals
Carbon compounds
Gases and liquids
Classification of elements and periodicity in properties
Periodic classification of elements
Salts and bases
States of matter
Thermodynamics

## Biology Syllabus

Cell: Structure and Function, Human Physiology
Control and coordination in animals and plants
Diversity of living organisms
Heredity and Evolution
Life Processes

Our environment
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Plant physiology
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Reproduction
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## Mathematics Syllabus

Calculus
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Relations and functions
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Geometry
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Introduction to trigonometry
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Linear programming
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Mathematical reasoning
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Polynomials
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Probability
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Quadratic equations
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Coordinate geometry
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Vectors and 3-D geometry
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Trigonometric functions
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Surface areas and volumes
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Statistics and probability
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