

# National Assessment for Scientific Temperament and Aptitude ( NASTA )

Syllabus Guidelines  
2019 - 2020



# SUBJECT AREAS & SKILLS ASSESSED

## SKILL AREAS

Students are assessed across the following attributes:

- ▲ **Preservation & Observation** : Using your senses to gather information about an object or event. It is description of what was actually perceived. This information is considered qualitative data.
- ▲ **Imagination, Creativity & Innovation** : Creativity is equally important as a means of adaptation. This skill empowers students to see concepts in a different light, which leads to innovation.
- ▲ **Critical Thinking & Problem Solving** : It is the most important quality for someone to have in health sciences. It refers ability to use knowledge, facts, and data to effectively solve problems. This doesn't mean that one need to have an immediate answer, it means that student should be able to think on their own, assess problems and find solutions.
- ▲ **Prediction & Interpretation** : Guessing the most likely outcome of a future event based upon a pattern of evidence.
- ▲ **Communication & Collaboration** : Using words, symbols, or graphics to describe an object, action or event. Collaboration means getting students to work together, achieve compromises, and get the best possible results from solving a problem.
- ▲ **Social Skills & Empathy** are crucial to the ongoing success of a professional. Business is frequently done through the connections one person makes with others around them.



The papers cover content on:

- ▲ **Grade - 5** : Food, Animals, Plants, Changing Families, Families & Friends, Shelter, Water, Travel
- ▲ **Grade - 6** : Things we make & Do, Family & Friends, Work & Play, Relationships, Components of food, Separation of substances, Fibre to Fabric, Body Movements
- ▲ **Grade - 7** : Motion & Measurements of Distances, Electricity & Circuits, Air around us, Fun with Magnets, Food, Natural Phenomenon, Light, Natural Phenomenon
- ▲ **Grade - 8** : Electric current & Circuit, Forest Products, Waste Management, Food, Materials, The World of Living, Friction, Sound
- ▲ **Grade - 9** : Pressure, Sound, Chemical Effect of Current, Natural Phenomenon, Atom & Molecules, Structure of Atoms, Is Matter Around us Pure, Matter in our Surrounding
- ▲ **Grade - 10** : Force & Law of Motion, Gravitation, Sound, Work & Energy, Acid, Bases & Salts, Metal & Non-metals, Carbon & its Compounds, Life Processes.



## SOCIAL SCIENCE

The papers cover content on:

- ▲ **Grade - 6** : The Earth in the Solar System, Globes: Longitudes & Latitudes, Motion of the Earth, Maps
- ▲ **Grade - 7** : Our Country – India, India - Climate, Vegetation & Wildlife, Natural Environment, Air
- ▲ **Grade - 8** : Natural Vegetation & Wildlife, Water, Natural Resource, Agriculture
- ▲ **Grade - 9** : Industries, Human Resources, Drainage, Climate
- ▲ **Grade - 10** : Natural Vegetation & Wildlife, Population, Forest & Wildlife, Agriculture



## MATHEMATICS

The papers cover content on:

- ▲ **Grade - 5** : Shapes & Spatial Understanding, Numbers and Operations, Fractional Numbers, Money
- ▲ **Grade - 6** : Data Handling, Pattern, Number System, Fraction
- ▲ **Grade - 7** : Algebra, Geometry, Ratio & Proportion, Fractions & Rational Numbers
- ▲ **Grade - 8** : Powers, Understanding Shapes, Rational Numbers, Mensuration.
- ▲ **Grade - 9** : Data Handling, Constructions of Quadrilaterals, Polynomials, Coordinate Geometry
- ▲ **Grade - 10** : Circle, Surface, Area & Volume, Real Numbers, Polynomials



## DIGITAL LITERACY

The papers cover content on:

- ▲ **Grade - 5** : Computer & Its Peripherals, Working with Ms-Word, Understanding Windows, Working in Excel
- ▲ **Grade - 6** : Application of Multimedia, Understanding Internet, Spreadsheet, Word Processing
- ▲ **Grade - 7** : Internet, Ms-PowerPoint, Computer & Security, Html
- ▲ **Grade - 8** : Html, Photoshop, Flow Chart, Algorithms
- ▲ **Grade - 9** : Photoshop, Working with Mask, Multimedia Authoring & Animation, Adding Styles to Webpage (Using CSS)
- ▲ **Grade - 10** : Web Scripting JavaScript, Network Safety of Computer System, Autodesk 3d Max, Animation In 3d Max

# NASTA Rigel

NASTA Rigel consists of two papers. Details are as under:

## A. Knowledge and Awareness Mapping Test - I

- ▲ Questions will be 40% from the current class syllabus and 60% from the previous class syllabus of Science and Social Science. 30% questions of paper 1 will assess the awareness of the students, 40% questions will assess knowledge level and 30% Higher Order Thinking Skills (HOTS).
- ▲ Paper Language: English, Hindi or other Regional Languages
- ▲ Eligibility: All students of CBSE, ICSE/ISC and State boards.

CLASS	SECTION	NO. OF QUESTIONS	TOTAL MARKS
5th to 10th (90 minutes)	Science	30	45
	EVS / Social Science	30	45
	<b>Grand Total</b>	<b>60</b>	<b>90</b>

## B. Knowledge and Awareness Mapping Test - II

- ▲ Questions will be 40% from the current class syllabus and 60% from the previous class syllabus of Mathematics and Digital Literacy. 30% questions of paper 2 will assess the awareness of the students, 40% questions will assess knowledge level and 30% Higher Order Thinking Skills (HOTS).
- ▲ Paper Language: English, Hindi or other Regional Languages
- ▲ Eligibility: All students of CBSE, ICSE/ISC and State boards

CLASS	SECTION	NO. OF QUESTIONS	TOTAL MARKS
5th to 10th (90 minutes)	Mathematics	30	45
	Digital Literacy	30	45
	<b>Grand Total</b>	<b>60</b>	<b>90</b>

## LEARN MORE

T: +91 - 9818928128

E: [info@kamp.res.in](mailto:info@kamp.res.in)

W: <http://kamp.nistads.res.in>