



# GANGA INTERNATIONAL SCHOOL

## CLASS – IX

### ENGLISH

S.NO.	TOPIC	
1.	<b>READING SKILLS</b>	Unseen Comprehension
2.	<b>WRITING SKILLS</b>	Notice, Letter writing(Formal & Informal), Paragraph writing, Story Writing, Diary writing, Message Writing , Email writing , Article Writing , Speech writing, Biographical Sketch.
3.	<b>GRAMMAR</b>	Nouns, Adjectives, Pronouns, Tenses, Verb, Active/Passive Voice, Direct/Indirect Narration, Modals, Determiners, Adverbs, Prepositions, Connectors, Synonyms/Antonyms, Idiomatic Expressions, Articles.

### SCIENCE

S.NO.	TOPIC	CONTENT
1.	<b>CROP PRODUCTION</b>	Crop Plants, Methods of Crop Production, Green Revolution, Nitrogen Cycle, Types of Crops.
2.	<b>MICROORGANISMS</b>	Types of microorganism, shape, nutrition, reproduction of bacteria, harmful & useful bacteria, size & structure of algae, useful & harmful algae, protozoa-useful & harmful, kinds of fungi- reproduction, useful & harmful, viruses-size & structure shape, useful & harmful.
3.	<b>MAN MADE MATERIALS</b>	Man-made materials, Polymers & Plastics, Synthetic fibers.
4.	<b>METALS &amp; NON-METALS</b>	Occurrence, properties, uses of metals and non-metals, reactivity series of metals, corrosion of metals, alloys, Methods of prevention of Corrosions.
5.	<b>FUELS &amp; COMBUSTION</b>	Characteristics of good fuel, classification of fuels, fossil fuels, combustion and conditions necessary for combustion, zones of candle flame, parts of extinguisher and its working.
6.	<b>CONSERVATION OF FORESTS AND WILD LIFE</b>	Bio diversity, flora & fauna, conservation of forests and wildlife.

7.	<b>CELLULAR LEVEL OF ORGANISATION</b>	The cell theory, unicellular & multicellular organisms, plant & animal cells, Various Cell Organelles and their functions, growth & division.
9.	<b>REPRODUCTION</b>	Sexual reproduction, Development in multicellular organisms, Internal & External Fertilization, endocrine glands. Puberty and adolescence, Endocrine System, Related organs and hormones, Metamorphosis.
10.	<b>FORCE &amp; PRESSURE</b>	Types of forces and its effects, force of friction & its effects on us, pressure & its application in our daily life, pressure by liquids, the atmospheric pressure. Types of friction, Advantages and Disadvantages of Friction How to increase and decrease friction.
11.	<b>SOUND</b>	How is sound produced, characteristics of sound, how does sound travel in a medium, functioning of human ear, reflection of sound and its applications, musical sound and noise.
12.	<b>ELECTRIC CURRENT</b>	Electric Current and its source, Potential Difference, Electric Circuits, Conductors and insulators, Chemical Effect of Current, Hazards of electricity.
13.	<b>LIGHT</b>	Types of reflection (regular, multiple and diffused), Laws of reflection, Characteristics of image formed by plane mirror
14.	<b>COAL AND PETROLEUM</b>	Occurrence, Fractional Distillation, Uses of by products, Destructive distillation of coal.
15.	<b>SOME NATURAL PHENOMENA</b>	Concept of charges, Lightening, Gold Leaf electroscope, Earthquake (precautions mainly).
16.	<b>REFRACTION AND DISPERSION OF LIGHT</b>	Refraction of light, refraction by Glass slab, Lenses, Structure of human eye, Role of nutrition in relation to blindness.
17.	<b>THE UNIVERSE</b>	The universe, galaxies, stars, planets, satellites, and constellations, Measuring distances in the universe, The solar system, The origin of the Universe, Earthquakes.
18.	<b>POLLUTION OF AIR AND WATER</b>	Pollution and conservation of water, Pollution and conservation of air.

## MATHEMATICS

S.NO.	TOPIC	CONTENT
1.	<b>RATIONAL NUMBERS</b>	Addition, Subtraction, Multiplication & Division of Rational Numbers, Properties of Rational Numbers, Representation of Rational Numbers on Number line.
2.	<b>ALGEBRA</b>	Linear Equations in One Variable & its Applications. Algebraic Expressions: - Addition, Subtraction & Multiplication. Factorization:- By Grouping, Using Identities & Splitting Middle Terms of Quadratic Expressions. Division of Polynomials (By Long Division Method).
3.	<b>COMMERCIAL MATHEMATICS</b>	Percentage, Profit & Loss, Discount, Sales Tax & VAT, Compound Interest & its Applications.
4.	<b>RATIO &amp; PROPORTIONS</b>	Direct & Inverse Proportions, Time & Work.
5.	<b>MENSURATION</b>	Area of Polygons, Volume & Surface Area of Cube, Cuboids & Cylinder.
6.	<b>EXPONENTS &amp; POWER</b>	Laws of Exponents & use of Exponents.
7.	<b>SQUARES &amp; SQUARE ROOTS, CUBES &amp; CUBE ROOTS</b>	Square and Square roots of Integers & Rational Numbers, Pythagorean Triplets. Cubes & Cube Roots of Integers & Rational Numbers.
9.	<b>GEOMETRY</b>	Types of Polygons, Sum of Angles of Regular Polygons (Interior & Exterior), Finding of Numbers of Diagonals, Types of Quadrilaterals & Their Properties, Constructions of Quadrilaterals. Visualizing Solid Shapes:- Applications of Euler's Formula
10.	<b>STATISTICS</b>	Data Handling:- Classification & Tabulation of Data, Bar Graphs, Histograms, Pie Charts & Probability. Introduction to Graph:- Cartesian Co-ordinates of A Point, Reading & Drawing Linear Graphs & Its Applications.

## HINDI

- प्रवेश परीक्षा हेतु पाठ्यक्रम (कक्षा आठवीं तक को आधार मानकर )
- अपठित गद्यांश
- पत्र लेखन - औपचारिक/ अनौपचारिक
- व्याकरण
- संज्ञा, सर्वनाम, विशेषण ,क्रिया, क्रिया- विशेषण, समास,मुहावरे ।
- रचनात्मक लेखन -
- चित्र वर्णन, संवाद लेखन।