



# GANGA INTERNATIONAL SCHOOL

## CLASS – IX

### ENGLISH

S.NO.	TOPIC	
1.	READING SKILLS	Unseen Comprehension
2.	WRITING SKILLS	Notice, Letter writing(Formal & Informal), Paragraph writing, Story Writing, Diary writing, Message Writing , Email writing , Article Writing , Speech writing, Biographical Sketch.
3.	GRAMMAR	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.	CROP PRODUCTION	Crop Plants, Methods of Crop Production, Green Revolution, Nitrogen Cycle, Types of Crops.
2.	MICROORGANISMS	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.	MAN MADE MATERIALS	Man-made materials, Polymers & Plastics, Synthetic fibers.
4.	METALS & NON-METALS	Occurrence, properties, uses of metals and non-metals, reactivity series of metals, corrosion of metals, alloys, Methods of prevention of Corrosions.
5.	FUELS & COMBUSTION	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.	CONSERVATION OF FORESTS AND WILD LIFE	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.

## **SOCIAL SCIENCE**

<b>S.NO.</b>	<b>TOPIC</b>
<b>1.</b>	<b>Indian Struggle freedom</b>
<b>2.</b>	<b>1857 Revolt</b>
<b>3.</b>	<b>Expansion of British Empire</b>
<b>4.</b>	<b>Economics effects of British Empire</b>
<b>5.</b>	<b>Types of Government</b>
<b>6.</b>	<b>Parliamentary Government</b>
<b>7.</b>	<b>Union Government</b>
<b>8.</b>	<b>Social Justice</b>
<b>9.</b>	<b>Judiciary</b>
<b>10.</b>	<b>Agriculture</b>
<b>11.</b>	<b>Natural Resources</b>
<b>12.</b>	<b>Industries</b>
<b>13.</b>	<b>India and Neighbouring Countries</b>