

# Ganga International School

## Syllabus for Entrance Exams 2010-11

Class: IX

### **ENGLISH**

#### **READING SKILLS**

Unseen Comprehension

#### **WRITING SKILLS**

Notice, Telegram, Letter writing (Formal & Informal), Paragraph writing, Poster Making, Diary writing, Post Card, Message Writing

#### **GRAMMAR**

Nouns, Adjectives, Pronouns, Tenses, Verb, Active/Passive Voice, Direct/Indirect Narration, Modals, Determiners, Adverbs, Prepositions, Connectors, Synonyms/Antonyms, Idiomatic Expressions, Articles.

### **SCIENCE**

#### **CROP PRODUCTION**

Crop Plants, Methods of Crop Production, Green Revolution, Nitrogen Cycle.

#### **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.

#### **MATERIALS IN DAILY LIFE**

Man made materials, Polymers & plastics, Synthetic fibers.

#### **METALS & NON-METALS**

Occurrence, properties, uses of metals and non-metals, reactivity series of metals, corrosion of metals, alloys.

#### **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.

#### **CONSERVATION OF FORESTS AND WILD LIFE**

Bio diversity, flora & fauna, conservation of forests and wildlife

#### **CELLULAR LEVEL OF ORGANISATION**

The cell theory, unicellular & multicellular organisms, plant & animal cells, growth & division.

#### **REPRODUCTION**

Sexual reproduction, Development in multicellular organisms, Internal & External Fertilization, endocrine glands.

#### **FORCE & PRESSURE**

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.

#### **SOUND**

How sound is produced, characteristics of sound, how sound travels in a medium, functioning of human ear, reflection of sound and its applications, musical sound and noise.

#### **ELECTRIC CURRENT**

Electric Current and its source, Potential Difference, Electric Circuits, Conductors and insulators, Chemical Effect of Current, Hazards of electricity.

#### **LIGHT**

Types of reflection (regular, multiple and diffused), Laws of reflection, Characteristics of image formed by plane mirror,

#### **REFRACTION AND DISPERSION OF LIGHT**

Refraction of light, refraction by Glass slab, Lenses, Structure of human eye, Role of nutrition in relation to blindness.

#### **THE UNIVERSE**

The universe, galaxies, stars, planets, satellites, and constellations, Measuring distances in the universe, The solar system, The origin of the Universe, Earthquakes.

#### **POLLUTION OF AIR AND WATER**

Pollution and conservation of water, Pollution and conservation of air.

## **MATHEMATICS**

### **ALGEBRA**

Linear equations in one variable, algebraic expression, factorization of polynomials

### **STATISTICS**

Data handling, Introduction to graph, Cartesian system, linear graph,

### **GEOMETRY**

Parallelogram, rectangle, square, rhombus, exterior angles, Construction.

### **MENSURATION**

Surface area and volume of cube, cuboid and cylinder, perimeter, circumference, Area of Circle, Square, Rectangle, Trapezium, Rhombus.

### **COMMERCIAL MATHEMATICS**

Selling Price (S.P.), Cost Price, Profit% and Loss%, Simple and Compound Interest.

### **RATIONAL NUMBERS**

Number line, Additive inverse, Multiplicative Inverse, Properties of Rational Numbers.

### **DIRECT AND INDIRECT PROPORTIONS**

### **VISUALISING SOLID SHAPES**

### **EXPONENTS AND POWERS**

Solving -ve powers, along with +ve powers, Standard form of expressions.

### **SQUARE AND SQUARE ROOTS**

Pythagorean Triplet,

### **CUBE AND CUBE ROOTS**

## **SOCIAL SCIENCE**

Indian Struggle freedom, 1857 Revolt,

Expansion of British Empire, Economic effects of British Empire,

Types of Government, Parliamentary Govt., as a Union Govt., Social Justice, Judiciary,

Agriculture, Natural Resources, Industries, India and Neighbouring Countries