



**ROYAL**  
Global School  
Guwahati

**ACADEMIC SESSION : 2024-25**

**SYLLABUS FOR EVALUATION FOR ADMISSION TO : GRADE - XI (SCIENCE)**

**ENGLISH**

**(25 MARKS)**

1. Comprehension Passage
2. Article Writing
3. Letter Writing
4. Narration (Direct & Indirect Speech)
5. Subject Verb Concord (Use the correct form of the verb)
6. Voice (Active/Passive Voice)
7. Determiners
8. Modal Verbs
9. Prepositions
10. Story Writing

**PHYSICS**

**(10 MARKS)**

1. Refraction (Spherical Lenses)-Ray diagram and Applications.
2. Refractive Index.
3. Series and Parallel Combination of Resistances and Ohm's Law.
4. Fuses, earthing, safety precautions, colour coding of wires.
5. Force experienced by a current carrying conductor in a uniform magnetic field.
6. Magnetic field produced by a straight current carrying conductor.

**CHEMISTRY**

**(10 MARKS)**

1. Balancing of chemical equation.
2. Chemical properties of acids.
3. Chemical properties of metals.
4. Electron dot structure.
5. Homologous series and alkane and alkene.

**BIOLOGY**

**(10 MARKS)**

1. Photosynthesis- definition, reaction, related experiments.
2. Plant hormones and human endocrine system.
3. Circulatory, respiratory, excretory and reproductive system.
4. Mendel's laws and application in crosses.
5. Nervous system and structure of neuron

**APTITUDE**

**(20 MARKS)**

1. Number & Letter series
2. Verbal Reasoning
3. Coding Decoding
4. Direction

5. Numerical Reasoning
6. General Awareness
7. Logical Arrangement of words
8. Number & Letter Puzzles

## **MATHEMATICS**

**(25 MARKS)**

### **1. Quadratic Equations**

- a. Solution of a quadratic equation by factorization
- b. Solution of a quadratic equation by quadratic formula
- c. Discriminant and Nature of Roots

### **2. Arithmetic Progressions**

- a. General term of an AP and its application
- b. Sum of n terms of an AP and its applications

### **3. Triangles**

- a. Similarity of triangles

### **4. Coordinate geometry**

- a. Distance formula
- b. Section Formula

### **5. Introduction to Trigonometry**

- a. Trigonometric identities
- b. Trigonometric ratios of some specific angles
- c. Application of Trigonometry in height and distance

### **6. Surface area and volumes**

- a. Surface area of combination of solids (Cube, cuboid, cylinder, cone, hemisphere, Sphere)
- b. Volume of combination of solids (Cube, cuboid, cylinder, cone, hemisphere, Sphere)

### **7. Statistics**

- a. Mean, Median and Mode of grouped data
- b. Empirical formula connecting mean, median and mode

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The above syllabus is derived taking into consideration the syllabi of CBSE, ICSE, SEBA and all other major boards of NE states.