



**THE INTERNATIONAL SCHOOL BANGALORE**  
**GRADE11 – MATHEMATICS ENTRANCE EXAMINATION DETAILS**

**1. SYLLABUS OUTLINE**

A student applying to Grade 11 is expected to have sufficient knowledge and understanding of the following topics, as per the Grade 10 level curriculum:

**Numbers**

- Types of Numbers
- Sets
- Powers & Roots
- Fractions, Decimals & Percentages
- Indices
- Standard Form
- Estimation
- Ratio & Proportion
- Percentages
- Surds

**Algebra**

- Algebraic Manipulation
- Algebraic Fraction
- Equations
- Inequalities
- Sequences
- Proportion

**Functions**

- Graphs of Functions – Linear, Quadratic and cubic
- Basic Functions
- Finding a quadratic function
- Asymptotes

**Co-ordinate Geometry**

- Gradient of Linear Graphs
- Length and Midpoint
- Equations of Linear Graphs
- Parallel Lines
- Perpendicular Lines

**Geometry**

- Angles
- Bearings
- Similarity
- Symmetry and Congruency
- Circle Theorem

## **Mensuration**

- Units of Measure
- Area and Perimeter
- Circles, Arcs and Sectors
- Surface Area and Volume of solids

## **Trigonometry**

- Pythagoras' Theorem
- Right Angled Triangles
- Trigonometric Functions
- Non-Right-Angled Triangles
- Applications of Trigonometry

## **Transformations**

- Reflection
- Rotation
- Enlargement
- Translation

## **Probability**

### **Statistics**

- Averages and Range
- Statistical Charts and Diagrams
- Scatter Diagram
- Cumulative Frequency Diagram

## **2. QUESTION PAPER PATTERN**

- **Nature of Questions:** Multiple Choice Questions (MCQs)
- **Number of Questions:** 25
- **Duration:** 30 minutes

## **3. Links to Past Question Papers**

- Sample QP with MS  
[GRADE11 Math Entrance paper.pdf](#)  
[Grade 11-Entrance-ANSWER KEY.pdf](#)