



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 Answer Key

[Grade 11 Entrance Paper- QP.docx](#)

[Grade 11-Maths-Answer Key.pdf](#)