



THE INTERNATIONAL SCHOOL BANGALORE GRADE 9 – MATHEMATICS ENTRANCE EXAMINATION DETAILS

1. SYLLABUS OUTLINE

A student applying to Grade 9 is expected to have sufficient knowledge and understanding of the following topics, as per middle years level curriculum:

- Real number system
- Primes, HCF and LCM
- Approximation and Estimation
- Pythagoras' theorem
- Linear equations and Simultaneous Linear Equations
- Simultaneous Linear Inequations
- Expansion and factorization of Algebraic expressions
- Algebraic fractions and formulae
- Angles formed by parallel lines and Polygons
- Percentage, Ratio, Rate And Speed
- Quadratic equations and graphs
- Congruence and similarity
- Area and volume of similar figures and solids
- Direct and Inverse Proportions
- Perimeter and area of plane figures
- Volume and surface area of cube, cuboid, cylinder, Prism, Pyramid, Cone, Sphere.
- Statistics data handling and Range, mean , median and mode
- Indices and Surds
- Coordinate Geometry
- Right angled and non- right angled Trigonometry and its applications
- Arc length, Sector Area and Radian Measure
- Geometrical properties of circles

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 1 with MS
[Gr 9 Sample Entrance Paper 1 QP.docx](#)
[Gr 9 Sample Entrance Paper 1 MS.docx](#)
- Sample QP 2 with MS
[Grade 9 Math entrance paper.pdf](#)
[Grade 9 Answer key.pdf](#)