

## THE INTERNATIONAL SCHOOL BANGALORE GRADE 7 – MATHEMATICS ENTRANCE EXAMINATION DETAILS

## 1. SYLLABUS OUTLINE

A student applying to Grade 7 is expected to have sufficient knowledge and understanding of the following topics, as per a Grade 6 level curriculum:

- Prime numbers
- Square roots and cube roots
- Highest common factor and lowest common multiple
- Negative numbers
- Addition and subtraction involving negative integers
- Multiplication, division and combined operations involving negative integers
- Fractions and mixed numbers
- Decimals
- Rational, irrational and real numbers
- Rounding and Significant figures
- Basic algebraic concepts and notations
- Addition and subtraction of linear terms
- Expansion and factorization of linear expressions
- Linear expressions with fractional coefficients
- Linear equations with integer coefficients
- Linear equations with fractional coefficients and fractional equations
- Applications of linear equations in real-world contexts
- Mathematical formulae
- Properties of angles formed by intersecting lines
- Properties of angles formed by two parallel lines and transversal
- Triangles
- Quadrilaterals
- Geometrical constructions of triangles and quadrilaterals
- Polygons
- Percentage
- Percentage change, percentage point and reverse percentage
- Percentage in real-world contexts
- Ratio
- Rate
- Speed

## 2. QUESTION PAPER PATTERN

• Nature of Questions: Multiple Choice Questions (MCQs)

Number of Questions: 25Duration: 30 minutes

## 3. Links to Past Question Papers

- 1. <u>Grade 7 Math Entrance question paper.pdf</u> <u>Grade 7-Entrance Answer key.pdf</u>
- 2. Grade 7 Math Entrance QP .docx
  Grade 7 Math Entrance Ans Key.docx