

Syllabus for Admission Test for Grade 7

Mathematics

1. Number

Place Value, Ordering & Rounding

- Understand place value in decimals (tenths, hundredths, thousandths)
- Multiply/divide whole numbers and decimals by 10, 100, and 1000
- Round numbers to 2 decimal places

Fractions, Decimals, Percentages, Ratio & Proportion

- Simplify fractions
- Identify and convert between equivalent fractions, decimals, and percentages
- Perform all four operations with fractions and decimals
- Recognize percentages (1% and multiples of 5% up to 100%) of shapes and numbers
- Compare and order numbers, fractions, and decimals
- Direct proportion and equivalent ratios

Counting & Sequences

- Count forward/backward using fractions, decimals, and negative numbers
- Apply position-to-term rules
- Generate sequences using square numbers

Integers & Powers

- Four operations with integers
- Order of operations
- Common multiples and factors
- Divisibility tests (3, 6, 9)
- Square and cube numbers

2. Geometry and Measure

Time

- 12 and 24-hr time, Reading clocks, elapsed time, time intervals (in minutes, hours)

Geometrical Reasoning, Shapes & Measurement

- Identify, describe, and classify quadrilaterals
- Know and label parts of a circle (radius, diameter, circumference, chord, tangent)
- Area of rectangles and triangles
- Recognize nets of cubes, cuboids, prisms, and pyramids
- Classify angles
- Use the rule that angles in a triangle sum to 180° to find missing angles

Position and Transformation

- Read and plot coordinates (including negative integers)

3. Statistics and Probability

Statistics

- Collect, organize, and represent categorical, discrete, and continuous data
- Select and justify appropriate methods of representation:
 - Venn diagrams, tally charts, frequency tables, bar charts, line graphs
- Calculate and interpret mode, median, mean, and range

Probability

- Use basic probability terms

4. Algebra

- Simplification of Algebraic Expressions
- Substitution
- Expanding (working with brackets)
- Factorisation
- Linear Equations

English

- **Grammar:**
 - Nouns (common noun, proper noun)
 - Pronouns
 - Collective nouns
 - Compound nouns
 - Verbs (singular and plural forms of verbs)
 - Auxiliary verbs (is, am, are, has, have, was, were)
 - Adjectives (comparative and superlative)
 - Adverb (manner, frequency, degree)
 - Modals of ability (can, could, will be able to, may, might)
 - Active Passive (simple present tense, simple past tense)
 - Prepositions
 - Interjections
 - Conjunctions (coordinating conjunctions: F.A.N.B.O.Y.S and subordinate conjunctions)
- **Vocabulary:**
 - Synonyms
 - Antonyms
 - Singular and plurals of nouns and verbs (by adding 's', 'es', 'ies)
 - Prefixes (--pre, un, re-)
 - Suffixes (--ful, --tion, --ment)
 - Homophones
- **Punctuation:** question mark, exclamation mark, full stop, comma, capital letters, and speech marks

ادب:

الفاظ کے جملے بنانا۔

قواعد:

واحد جمع۔ الفاظ متضاد۔ الفاظ مترادف۔ محاورات۔ سابق۔ لاحق۔

رموز اوقاف (ختمہ، سکتہ، واوین، قوسین)

تفہیم:

ان دیکھی تفہیم
