

**The entrance exam is based on Cambridge IGCSE Extended Mathematics syllabus.
A graphical display calculator should be used**

Arithmetics

Number concepts
Fractions and decimals
Powers and roots
Simple sequences
Units, money conversion
Investing money, simple and compound interest
Ratio and proportion

Algebra

Brackets
Indices
Equations and formula rearrangement
Factorising
Quadratic equations
Equation of straight line
Simultaneous equations
Quadratic formula
Functions and function notation

Geometry

Lines and shapes
Perimeter, area, volume
Pythagorean Theorem
Similar shapes
Bearings
Trigonometry (right and not right triangles)

Statistics and Probability

Data classification
Possibility diagrams
Averages and making comparisons
Box-and-whisker diagrams
Scatter plots, line of best fit
Tree and Venn diagrams