



## **ENTRANCE EXAMINATION 2024**

### **MATHEMATICS PORTION – YEAR 9**

#### **(NON CALCULATOR)**

#### **NUMBERS**

- Multiplication and division of negative numbers
- HCF and LCM
- Powers and roots
- Prime factors
- Order of operations - BODMAS
- Fractions and decimals - All four operations, word problems
- Percentages – Real life problems involving profit %, loss %, simple interest, Compound Interest, Original quantity
- Estimations
- Standard form
- Ratio and Proportion

#### **ALGEBRA**

- Expanding brackets and simplifying by collecting like terms
- Factorizing simple expressions by taking out the common factor.
- Changing the subject of a formula
- Solving linear equations
- Solving linear simultaneous equations
- Substituting into formulae
- Graphs of linear functions

#### **GEOMETRY AND MEASURES**

- Angle Facts
- Congruent triangles
- Area and Perimeter
- The circle – Circumference and area
- Surface area and volume of prisms
- Transformations (Reflections, Translations and Enlargement )

## **STATISTICS**

- Probability
- To find the mean , median , mode and range from a grouped data
- Drawing and interpreting Bar charts and Pie charts