



ST.MARY'S CATHOLIC HIGH SCHOOL, DUBAI.

ENTRANCE EXAMINATION for Academic Year 2019-2020

MATHEMATICS PORTION – YEAR 9

ONE PAPER – MARKS : 50 (Non calculator)

1. Number

- a. Multiplication and division of negative numbers
- b. HCF and LCM
- c. Powers and roots
- d. Prime factors
- e. Order of operations - BODMAS
- f. Fractions and decimals - All four operations, word problems
- g. Percentages – Real life problems involving profit %, loss %, simple interest, Compound Interest, Original quantity
- h. Estimations
- i. Standard form
- j. Ratio and Proportion

2. Algebra

- a. Expanding brackets and simplifying by collecting like terms
- b. Factorizing simple expressions by taking out the common factor.
- c. Changing the subject of a formula
- d. Solving linear equations
- e. Substituting into formulae
- f. Linear equation including word problems

3. Geometry and measure

- a. Alternate and corresponding angles
- b. Geometric properties of quadrilaterals.
- c. The circle – Circumference and area
- d. Surface area and volume of prisms
- e. Transformations (Reflections, Translations and Enlargement)

4. Statistics

- a. Probability
- b. To find the mean , median , mode and range – Ungrouped data
- c. Drawing and interpreting Bar charts and Pie charts