## Module 1 <br> Mathematics

### 1.1 Arithmetic

Arithmetical terms and signs, methods of multiplication and division, fractions and decimals, factors and multiples, weights, measures and conversion factors, ratio and proportion, averages and percentages, areas and volumes, squares, cubes, square and cube roots.

### 1.2 Algebra

(a) Evaluating simple algebraic expressions, addition, subtraction, multiplication and division, use of brackets, simple algebraic fractions;
(b) Linear equations and their solutions; Indices and powers, negative and fractional indices; Binary and other applicable numbering systems; Simultaneous equations and second degree equations with one unknown; Logarithms.

### 1.3 Geometry

(a) Simple geometrical constructions;
(b) Graphical representation; nature and uses of graphs, graphs of equations/functions;
(c) Simple trigonometry; trigonometrical

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2 relationships, use of tables and rectangular and polar coordinates.

