BCA-S110: BASIC MATHEMATICS

(To be offered as an audit pass course by the candidates not studied mathematics at 10+2 level)

Evaluating Algebraic Expressions
 Order of operations
 Evaluating algebraic expressions

Linear Equations
 Translating algebraic expressions
 Combining like terms
 Solving linear equations: Addition property
 Solving linear equations: Multiplication property
 Combining rules
 Literal equations
 Solving linear inequalities

Graphing Linear Equations
 Linear equations in two variables
 The Cartesian coordinate system
 The graph of a linear equation
 Slope
 Point-slope form of a line
 Graphing linear inequalities

Systems of Linear Equations
 Systems of equations in two variables (addition/elimination)

Operations with polynomials
 Positive integer exponents
 Zero and negative integer exponents
 Definition of polynomials
 Addition and subtraction of polynomials
 Multiplying polynomials

Factoring polynomials
 Introduction to factoring
 Difference of squares
 Quadratic trinomials
 Solving equations by factoring
 Some word problems involving quadratic equations

Radical expressions and complex numbers
 Introduction to roots and radicals

Simplifying radical expressions [No variables]
Operations with radical expressions   [No rationalizing binomials]
Complex numbers [i notation only, no operations]

Quadratic equations and some conics
Special methods, completing the square
The quadratic formula
Parabolas [Graph by table]