MATHEMATICS SCEHEME
S.S.3

SN	TOPIC	TOPICS
1.	Logarithm	- Revision of laws of indices - Laws of logarithm - Subtraction in logarithm - Equations in logarithm
2.	Surds	- Meaning of rational and irrational number leading to the definition of surds - The rules guiding the basic operation with surds - Conjugate of a binomial surd using the idea of difference of two squares - Application to solving triangles involving trigonometric ratios of special angles 30°, 45°, 60° - Pythagoras theorem - Evaluation of expressions involving surds
3.	Matrices	- Definition, order and notation of a matrix - Types of matrices - Addition and subtraction of matrices - Scalar multiplication of matrices and multiplication of two matrices
4.	Matrices and Determinates	- Algebra of 2 x 2 matrices - Determinant of a 2 x 2 - Transpose of a matrix - Application of matrix to solving simultaneous equations -
5.	Longitude and latitude	- The earth as a sphere - Identification of North and South poles - Longitudes, latitudes, small and great circles - Meridian and equator, parallel of latitude - Radius of parallel of latitude - Radius of the earth - Location of places on the earth surface - Revision of – arc length of a curve
6.	Quadratic Graph	- Using quadratic graph to solve a related equation for example. Graph of $y = x^2 + 5x + 6$ to solve x^2

		$+5x + 4 = 0$

SN	TOPIC	CONTENT
7.	Graphical solution of a pair of equation	- Solving graphically a pair of equations - One linear one quadratic for example, $y = ax^2 + bx + c$ and $y = mx + k$ where a, b, c, k and m are constants
8.	Plane geometry	- Angle and plane - Congruent triangles - Parallelogram - Intercepts and midpoint
9.	Angles and Polygon	- Sum of interior angles of a polygon - Sum of exterior angles of a polygon - Number of sides of a polygon
10	Trigonometry	- Trigonometric ratio of angle 30°, 45°, 60°, etc - Pythagoras theorem - Sine, cosine and tangent of angles from $0^o – 360^o$, sine and cosine graphs - Solution of triangles, angles of elevations and depression
11	Bearings and Distances	- Bearings and distances -
12	Circle Theorem	- Steps in a formal proof of a theorem - Steps in solving a rider theorems and riders - Angles at the centre - Circumference of a circle - Angles in the same segment of a circle etc