# THIRD TERM E-LEARNING NOTE 

## SUBJECT: MATHEMATICS

CLASS: SSS 1

## SCHEME OF WORK

## WEEK TOPIC

1. Mensuration: The Concept of B - D a Shape Cube, Cuboids, Cylinder, Triangular Prism, Cone, Rectangular Based Pyramid, Total Surface Area of Cone, Cylinder and their Volumes.
2. (a) Volumes of Frustums of Cone, Rectangular Based Pyramid and other Pyramids
(b) Proofs of Angles Sum of a Triangle $=180^{\circ}$
(c) The Exterior Angle
3. Geometrical Construction
(a) Revision of Construction of Triangle
(b) Drawing and Bisection of Line Segment
(c) Construction and Bisection of Angles $90^{\circ}, 45^{\circ}, 135^{\circ}, 22^{1} / 2^{0}, 57^{1} / 2^{\circ}$
(d) Construction and Bisection of Angles: $30^{\circ}, 60^{\circ}, 90^{\circ}, 120^{\circ}, 150^{\circ}$, etc.
4. Construction:
(a) Construction of Quadrilateral Polygon i.e. four sided figure with given certain conditions parallelogram
(b) Construction of Equilateral Triangle
(c) Locus of Moving Points Including Equidistance from Two Lines of Two Points and Constant Distance from the Point.
5. Deductive Proof:
(a) Sum of Angles of a Triangle.
(b) Relationship of Triangles on a Straight Line.
(c) Revision of Angles on Parallel Line Cuts by a Transversal Line.
(d) Congruent Triangles.
(e) Properties of Parallelogram and Intercept Theorem.
6. Statistics
(a) Collection and Tabulation and Presentation of data e.g. data from height, ages, weight, test and examination scores of students, population of students from different schools, classes etc.
(b) Different Species of Animals and Types of Vehicles etc.

Calculation of Range, median and mode of ungrouped data
(a) Data Already Collected by the Students
(b) Data Collected from Other Statistical Records
7. Revision
8. Collection, Tabulation and Presentation of Grouped Data
(a) Data from height, ages, weights, test and examination scores of students
(b) Population of students from different classes.
9. Calculation of Range, Median and Mode of Grouped Data
(a) Data already collected by the students
(b) Other statistical records
10. Statistical Graphs:
(a) Drawing of bar chart, pie-chart and histogram
(b) Cumulative frequency curve
(c) Reading and drawing inferences from the graph
11. (a) Mean deviation, Variance and standard deviation of grouped data use in solving practical problems related to real life situations
12. Revision/Examination

## REFERENCE BOOKS

- New General Mathematics SSS 1 by M.F. Macrae et al
- Essential Mathematics SS 1


## WEEK ONE

TOPIC:
Mensuration: The concept of B-D a shape cube, cuboids, cylinder, triangular prism, cone, rectangular based pyramid, total surface area of cone, cylinder and their volumes.

## MENSURATION OF SOLID SHAPES

Properties of solid shapes
a) A Cube


A cube has the following properties.

1. It has 12 straight edges
2. It has 8 vertices
3. It also has 6 square faces
4. Its net consists of 6 square faces joined together
b) A Cuboid


A cuboid has the following properties.

1. It has 12 straight edges
2. It has 8 vertices
3. It also has 6 rectangular faces
4. Its net consist of 6 rectangular faces
c) A Triangular Prism


A triangular prism has the following properties:

1. It has 6 vertices
2. It has 9 straight edges
3. It also has 3 rectangular faces and two triangular faces which are...
