THIRD TERM E-LEARNING NOTE

SUBJECT: MATHEMATICS CLASS: SSS 1

SCHEME OF WORK

| WEEK | TOPIC |
|------------|--------|
| VV C, C, C | 117611 |

- 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°
 - (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° , 45° , 135° , $22^{1}/2^{\circ}$, $57^{1}/2^{\circ}$
 - (d) Construction and Bisection of Angles: 30°, 60°, 90°, 120°, 150°, 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

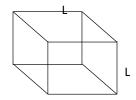
TOPIC:

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

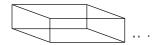
a) A Cube



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

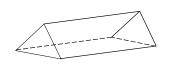
b) A Cuboid



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

- It has 9 straight edges
- It also has 3 rectangular faces and two triangular faces which are...