Delhi Public School
Srinagar

CLASS – **9th-10th**

CLASSES REQUIRED	Eighteen (18)
TOPIC	Linear equation in two variables
CONCEPT & SKILLS	**Concepts:** (i) Solution of linear equations. (ii) Graphical method (iii) Algebraic method. (iv) Equations reducible to a pair of linear equation in two variables. **Skills:** Arithmetical skills Logical thinking Critical thinking.
LEARNING OUTCOMES	To learn to plot two equations on graph. Formulate the given situation as a pair of linear equations and hence find their solution. To analyze graph
INSTRUCTIONAL TOOLS & REFERENCES	All classroom instructional tools, text book and reference.
PEDAGOGY	Discussion and explanation in classroom. Random questioning. Concept formation. In text questions.

ACTIVITY / ASSIGNMENT / RESEARCH	Finding solution of linear equations in two variables by graphical method. Assignment from the same topic with Hots questions are given to the students.
ASSESSMENT	Graphical interpretation and algebraic interpretation of linear equation in two variables is being assessed.
SYLLABUS FOR FORMATIVE & SUMMATIVE ASSESSMENT	FA-1 Real numbers and Polynomials. FA-2 Linear Equations in two variables and Triangles. SA-1 Trigonometry and Statistics.

CLASS – **9th-10th**

CLASSES REQUIRED	18 (Eighteen)
TOPIC	Triangles
CONCEPT & SKILLS	1. Criteria for similarity of triangles 2. Area of similar triangles 3. Pythagoras theorem Thinking skills Geometrical skills Drawing skills
LEARNING OUTCOMES	To understand the concept of similarity of triangles. To prove and apply Basic Proportionality Theorem To learn and apply similarity rules (SAS,SSS,AAA, RHS) To learn and apply Pythagoras Theorem and its converse.
INSTRUCTIONAL TOOLS & REFERENCES	Text Book and References.
PEDAGOGY	Discussion, Random questioning, concept formation, Brain storming, In text questions.
ACTIVITY / ASSIGNMENT / RESEARCH	To prove Pythagoras Theorem by paper cutting and folding. Sample papers for SA-1 provided to the children and discussed with them.
ASSESSMENT	Assesment was done on basis of activity done on laboratory manual.

SYLLABUS FOR FORMATIVE & SUMMATIVE ASSESSMENT	FA-1 Real numbers and Polynomials. FA-2 Linear Equations in two variables and Triangles. SA-1 Trigonometry and Statistics.

CLASS – **9th-10th**

CLASSES REQUIRED	20 (Twenty)
TOPIC	Trigonometry
CONCEPT & SKILLS	Trigonometric ratios, trigonometric ratios of some specific angles, trigonometric ratios of complementary angles, trigonometric identities. Thinking Skills: Application Skills: Logical Skills:
LEARNING OUTCOMES	To recall definitions of basic T-ratios. T-ratios of specific angles. Trigonometric identities.
INSTRUCTIONAL TOOLS & REFERENCES	Text Book and Reference.
PEDAGOGY	Concept formation, Discussion, Random questioning.
ACTIVITY / ASSIGNMENT / RESEARCH	Sample papers for SA-1 provided to the children and discussed with them.
ASSESSMENT	Assessment done on the basis of sample paper provided to the students.

SYLLABUS FOR FORMATIVE & SUMMATIVE ASSESSMENT	FA-1 Real numbers and Polynomials. FA-2 Linear Equations in two variables and Triangles. SA-1 Trigonometry and Statistics.

CLASS – **9th-10th**

CLASSES REQUIRED	8 (Eight)
TOPIC	Statistics
CONCEPT & SKILLS	1. Mean of grouped data. 2. Mode of grouped data. 3. Median of grouped data. 4. Graphical representation of cumulative frequency distribution or Ogive. 1. Comprehension skills, 2. Analysis skills 3. Application skills.
LEARNING OUTCOMES	1. To find mean by direct method, assumed mean method and step deviation method. 2. To learn to find the mode of grouped data. 3. To learn to calculate cumulative frequency of a class. 4. To find median for grouped data using formula and by using ogive.
INSTRUCTIONAL TOOLS & REFERENCES	Text Book and Reference.
PEDAGOGY	Concept formation, Discussion, Random questioning.
ACTIVITY / ASSIGNMENT / RESEARCH	Raw data collection, grouping, analysing and interpretation. Group activity done on the survey conducted by the children.

ASSESSMENT	Assessment done on the basis of sample paper provided to the students.
SYLLABUS FOR FORMATIVE & SUMMATIVE ASSESSMENT	FA-1 Real numbers and Polynomials. FA-2 Linear Equations in two variables and Triangles. SA-1 Trigonometry and Statistics.

CLASS – **9th-10th**

CLASSES REQUIRED	4 (four)
TOPIC	Co-Ordinate Geometry
CONCEPT & SKILLS	Cartesian system, plotting a point in the plane if its co-ordinates are given. Skills: 1. To find the area of different geometrical figures by plotting the points in the Cartesian plane. 2. Graphical skill 3. Thinking skill 4. Logical skill.
LEARNING OUTCOMES	1. To reinforce the understanding of plotting of points in co-ordinate plane. 2. Specify and describe location of the cities using common language and geometric vocabulary. 3. To find area of different figures.
INSTRUCTIONAL TOOLS & REFERENCES	Text Books and References.
PEDAGOGY	Concept formation, Discussion, Random questioning.
ACTIVITY /	Activity done in the class by asking children to mention their place on basis of

ASSIGNMENT / RESEARCH	Cartesian plane.
ASSESSMENT	Assessment done on the basis of sample paper provided to the students.
SYLLABUS FOR FORMATIVE & SUMMATIVE ASSESSMENT	FA-1: Number system, Polynomials FA-2: Co-Ordinate Geometry, Lines and Angles. SA-1: Triangles, Heron's Formula.
CLASSES REQUIRED	6 (six)
TOPIC	Euclid's Geometry
CONCEPT & SKILLS	1. Euclid's definitions, Axioms and postulates. 2. Equivalent version of Euclid's fifth postulates. 3. Thinking skills 4. Reasoning skills. 5. Application skills.
LEARNING OUTCOMES	1. To recognise point, line segment, surface in the given object/shape. 2. To learn about various terms, like axioms, postulates, theorems. 3. To make a mind map on important points in the chapter.
INSTRUCTIONAL TOOLS	Text Book and references.

& REFERENCES	
PEDAGOGY	Discussion, concept formation, Random questioning.
ACTIVITY / ASSIGNMENT / RESEARCH	Sample Paper for the same topic provided to the children.
ASSESSMENT	Assessment done on the basis of sample paper provided to the students.
SYLLABUS FOR FORMATIVE & SUMMATIVE ASSESSMENT	FA-1: Number system, Polynomials FA-2: Co-Ordinate Geometry, Lines and Angles. SA-1: Triangles, Heron's Formula.

CLASS – **9th-10th**

CLASSES REQUIRED	18 (Eighteen)
TOPIC	Lines and Angles
CONCEPT & SKILLS	1. Basic terms and definitions. 2. Intersecting and non intersecting lines. 3. Parallel lines and a transversal. 4. Different pair of angles. 5. Angle sum property of a Triangle. 6. Exterior angle property of a triangle.
LEARNING OUTCOMES	Recall and review basic geometrical terms, lines, angles, line segment, point, plane, collinear and non-collinear points, types of angles viz. Acute, obtuse, right, reflex, straight, pair of angles viz, complementary , supplementary, adjacent, vertically opposite angles, linear pair of angles.
INSTRUCTIONAL TOOLS & REFERENCES	Text Book and references.
PEDAGOGY	Concept formation, Brain storming, Random questioning.
ACTIVITY / ASSIGNMENT /	Sample Paper for the same topic provided to the children.

RESEARCH	
ASSESSMENT	Assessment done on the basis of sample paper provided to the students.
SYLLABUS FOR FORMATIVE & SUMMATIVE ASSESSMENT	FA-1: Number system, Polynomials FA-2: Co-Ordinate Geometry, Lines and Angles. SA-1: Triangles, Heron's Formula.

CLASSES REQUIRED	18 (Eighteen)
TOPIC	Triangles
CONCEPT & SKILLS	1. Congruence of triangles. 2. Criteria for congruence of triangles. 3. Some properties of a triangle. 4. Inequalities in a triangle. Skills: 1. Logical, Geometric, Application, Thinking.
LEARNING OUTCOMES	1. To learn about congruent triangles. 2. To understand different criteria for congruence of triangles viz. SSS, SAS, RHS, AAS,ASA. 3. To learn some properties of triangle. 4. To understand inequalities in a triangle.
INSTRUCTIONAL TOOLS & REFERENCES	Text Book and references.
PEDAGOGY	Discussion, Concept formation, Brain storming.

ACTIVITY / ASSIGNMENT / RESEARCH	Sample Paper for the same topic provided to the children.
ASSESSMENT	Assessment done on the basis of sample paper provided to the students.
SYLLABUS FOR FORMATIVE & SUMMATIVE ASSESSMENT	FA-1: Number system, Polynomials FA-2: Co-Ordinate Geometry, Lines and Angles. SA-1: Triangles, Heron's Formula.

CLASSES REQUIRED	6 (Six)
TOPIC	Heron's formula.
CONCEPT & SKILLS	1. Heron's formula 2. Area of triangle by Heron's formula. 3. Application of Heron's formula in finding area of quadrilateral. Skills: Application skill, Thinking skill, Critical skill.
LEARNING OUTCOMES	1. To check the knowledge of basic concepts required for finding area of a triangle. 2. To find the area of triangle which the sides of triangle are given. 3. To find the area of quadrilateral by dividing them into two triangles.
INSTRUCTIONAL TOOLS & REFERENCES	Text Book and references.
PEDAGOGY	Random questioning. Discussion, Concept formation,
ACTIVITY / ASSIGNMENT / RESEARCH	Sample Paper for the same topic provided to the children.
ASSESSMENT	Assessment done on the basis of sample paper provided to the students.

SYLLABUS FOR FORMATIVE & SUMMATIVE ASSESSMENT	FA-1: Number system, Polynomials FA-2: Co-Ordinate Geometry, Lines and Angles. SA-1: Triangles, Heron's Formula.