ROADMAP FOR CLASS 10

1. Subject: Mathematics

2. Objectives:

The broad objectives of teaching of mathematics at secondary stage are to help the learners

- (i)   to consolidate the Mathematical knowledge and skills acquired at the middle stage;

- (ii)   to develop positive ability to think, analyze and articulate logically;

- (iii)   to develop interest in Mathematics as problem solving tool in various fields;

- (iv)   to acquaint students with different aspects of Mathematics in daily life;

- (v)   to develop an interest in students to study Mathematics as a discipline;

- (vi)   to perform mathematical operations and manipulations with confidence.

- (vii)   to develop speed and accuracy in Mathematical skills.

- (viii)   to develop investigative skills in Mathematics.

- (ix)   to appreciate the usefulness, power and beauty of Mathematics.

- (x)   to develop abstract, logical and critical thinking upon their work and the work of others.

3. Month wise division of syllabus:

LESSON NO.	TOPIC	MONTH
2	Polynomials	April
1	Real Numbers	April
3	Linear equations in two variables	May
4	Quadratic Equations	May
7	Coordinate geometry	July
10	Circles	July
5	Arithmetic Progression Ex 5.1 ,5.2	July
5	Arithmetic Progression Ex 5.3,5.4	August
8	Introduction to Trigonometry	August

9	Applications of Trigonometry	August
11	Area Related to Circles	October
12	Surface Area & Volume	October
6	Triangles	November
14	Probability	November
13	Statistics	November

4. Scheme of assessment & weightage:

Sr. No.	Assessment Cycle	Month of Assessment	Mode of Assessment	Weightage
1	PT1	May	Pen paper Test	40
2	PT2	July/August	Pen paper Test	40
3	Half YEARLY	September	Pen paper Test	80
4	PT3	October/November	Pen paper Test	40
5	PT4 (PAT)	December	Pen paper Test	80
6	Pre-Board	January	Pen paper Test	80
7.	Final	February/March	Pen paper Test	80

5. Curriculum Content for various assessments:

- Periodic -I (May)

  - REAL NUMBERS [1]

  - POLYNOMIALS [2]

  - LINEAR EQUATIONS IN TWO VARIABLES [3]

- Periodic -II (July)

  - COORDINATE GEOMETRY (7)

  - QUADRATIC EQUATIONS [4]

- Half Yearly (September)

- CIRCLES [10]

- ARITHMETIC PROGRESSION [5]

- INTRODUCTION TO TRIGONOMETRY [8]

- APPLICATIONS OF TRIGONOMETRY [9]

Topics already assessed in periodic test-1 will be tested again in periodic test-2 for limited weightage

- Periodic -III (November)

- AREA RELATED TO CIRCLES [11]

- SURFACE AREA AND VOLUME [12]

- TRIANGLES (6)

- STATISTICS [13]

- PROBABILITY [14]

Note: Full syllabus will be tested for final examination

Note: Paper pen tests will consist of MCQ's, VSA, SA, LA, Case Based, HOTS questions of 1,2 3, 4 & 5 marks weightage

5. Internal Assessment Break-up:

Sr. No.	Type of Assessment	Mode of Assessment	Weightage
1	Periodic Test	Pen paper Test	5
2	Multiple Assessment		5
3	Enrichment Activity		5
4	Portfolio		5

6. CRAB Worksheets per chapter will be assigned.

7. Prescribed books:

   MATHEMATICS- NCERT Book

 Suggested Books:

   MATHEMATICS NCERT Exemplar