



BLOOM PUBLIC SCHOOL
C-8 Vasant Kunj New Delhi
SYLLABUS FOR THE SESSION 2021-22

Class: X

Subject: Mathematics

MONTH	CHAPTERS (NCERT TEXT BOOK)	CONTENT (As per Rationalised Syllabus)
April	Ch.1: Real Numbers Ch.2: Polynomials	Fundamental Theorem of Arithmetic - statements after reviewing work done earlier and after illustrating and motivating through examples. Decimal representation of rational numbers in terms of terminating/non-terminating recurring decimals. Zeroes of a polynomial. Relationship between zeroes and coefficients of quadratic polynomials only.
June	Ch.2: Polynomials (contd) Ch.3: Pair of Linear Equations in two variables	Pair of linear equations in two variables and graphical method of their solution, consistency/inconsistency. Algebraic conditions for number of solutions. Solution of a pair of linear equations in two variables algebraically - by substitution and by elimination. Simple situational problems. Simple problems on equations reducible to linear equations
July	Ch.4: Quadratic Equations	Standard form of a quadratic equation $ax^2 + bx + c = 0$, ($a \neq 0$). Solutions of quadratic equations (only real roots) by factorization, and by using quadratic formula. Relationship between discriminant and nature of roots. Situational problems based on quadratic

		<p>squares of their corresponding sides.</p> <p>8. (Prove) In a right triangle, the square on the hypotenuse is equal to the sum of the squares on the other two sides. 9. (Motivate) In a triangle, if the square on one side is equal to sum of the squares on the other two sides, the angle opposite to the first side is a right angle.</p>
	Periodic Assessment -1	Chap 1,2,3,4
August	<p>Ch.6: Triangles (contd.)</p> <p>Ch.7: Coordinate Geometry</p> <p>Ch.8: Introduction to Trigonometry</p>	<p>LINES (In two-dimensions) Review: Concepts of coordinate geometry, graphs of linear equations. Distance formula. Section formula (internal division)</p> <p>Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (well defined). Values of the trigonometric ratios of 30°, 45° and 60° . Relationships between the ratios.</p> <p>TRIGONOMETRIC IDENTITIES Proof and applications of the identity $\sin^2 A + \cos^2 A = 1$. Only simple identities to be given</p>
September	<p>Ch. 12: Areas related to Circles</p> <p>Ch. 15: Probability</p>	<p>Motivate the area of a circle; area of sectors and segments of a circle. Problems based on areas and perimeter / circumference of the above said plane figures. (In calculating area of segment of a circle, problems should be restricted to central angle of 60° and 90° only. Plane figures involving triangles, simple quadrilaterals and circle should be taken.)</p> <p>Classical definition of probability. Simple problems on finding the probability of an</p>

		event.
	Periodic Assessment -2	Chapters 6,7,8
October	Revision Pre-board Term 1 Exam Ch.9: Some applications of Trigonometry	Chapters 1,2,3,6,7,8,12,15 HEIGHTS AND DISTANCES- Angle of elevation, Angle of Depression. Simple problems on heights and distances. Problems should not involve more than two right triangles. Angles of elevation / depression should be only 30° , 45° , 60° .
November	Ch.10: Circles	Tangent to a circle at, point of contact 1. (Prove) The tangent at any point of a circle is perpendicular to the radius through the point of contact. 2. (Prove) The lengths of tangents drawn from an external point to a circle are equal
December	Ch.11: Constructions	1. Division of a line segment in a given ratio (internally). 2. Tangents to a circle from a point outside it.
January	Ch.13: Surface areas and Volumes Ch.14: Statistics	Surface areas and volumes of combinations of any two of the following: cubes, cuboids, spheres, hemispheres and right circular cylinders/cones. 2. Problems involving converting one type of metallic solid into another and other mixed problems. (Problems with combination of not more than two different solids be taken). Mean, median and mode of grouped data (bimodal situation to be avoided). Mean by Direct Method and Assumed

	Periodic Assessment-3	Mean Method only Chapters 5,9,10
February	Revision Pre-board Exam Term 2	Chapters 4,5,9,10,11,13,14
March	CBSE Term 2 Exam	Chapters 5,9,10,11,13,14

ASSESSMENT SYLLABUS:

1. Periodic Assessment-1 (July-August)

Chapters: Ch.1: Real Numbers

Ch.2: Polynomials

Ch.3: Pair of Linear Equations in two variables

Ch.4: Quadratic Equations

2. Periodic Assessment 2 (September)

Ch.6: Triangles

Ch.7: Coordinate Geometry

Ch.8: Introduction to Trigonometry

3. Pre board Term 1 (October) /Term 1 End Exam

Chapters: Ch.1: Real Numbers

Ch.2: Polynomials

Ch.3: Pair of Linear Equations in two variables

Ch.6: Triangles

Ch.7: Coordinate Geometry

Ch.8: Introduction to Trigonometry

Ch. 12: Areas related to Circles

Ch. 15: Probability

4. Periodic Assessment-3 (January)

Chapters: Ch. 5: Arithmetic Progressions

Ch. 9: Some applications of Trigonometry

Ch. 10: Circles

5. Pre board Exam (Feb) / Term 2 End Exam

Ch.4: Quadratic Equations

Ch.5: Arithmetic Progressions

Ch.9: Some applications of Trigonometry

Ch.10: Circles

Ch.11: Constructions

Ch.13: Surface areas and Volumes

Ch.14: Statistics

