Reduced Syllabus : Class X : Mathematics (Standard) : 80 Marks : 2020-2021
Deleted Topics

Unit / Chapter	Syllabus Reduced
Unit -1 : Number System	
1. Real Number	Totally deleted
Unit-II : Algebra	
1. Polynomials	No Portion deleted
2. Pair of linear equations in two variables	Simple situational problem
3. Quadratic Equations	Situational problems based on quadratic equations related to day activities to be incorporated
4. Arithmetic Progression	Problems related to real life based problem
Unit-III : Coordinate Geometry	
1. Lines (In two dimensions)	No portion deleted
Unit-IV : Geometry	
1. Triangles	Application of Theorem : 6.6 and Theorem: 6.9 of text book
2. Circles	No portion deleted
3. Constructions	No portion deleted
Unit-V : Trigonometry	
1. Introduction to Trigonometry	No portion deleted
2. Trigonometric Identities	Totally deleted
3. Height & Distonces	No portion deleted
Unit-VI : Mensuration	
1. Areas related to circles	Areas of combination of plane figures (Ex-12.3)
2. Surface areas and volumes	Frustum of a cone
Unit-VII : Statistics and Probability	
1. Statistics	Cumulative frequency graph
2. Probability	No portion deleted

Reduced Syllabus : Class X : Mathematics (Standard) : 80 Marks : 2020-2021

Units	Unit Name	Marks
1	Algebra	22
II	Coordinate Geometry	07
III	Geometry	15
IV	Trigonomety	12
V	Mensuration	10
VI	Statistics & Probabilty	14
	Total	**80**

Unit I : Algebra

1. Polynomials :

Zeros of a polynomial. Relationship between zeros and coefficients of quadratic polynomials. Statement and simple problems on division algorithm for polynomials with real coefficients.

2. Pair of Linear Equations in two variables :

Pair of linear equations in two variables and graphical method of their soultion. Algebraic conditions for number of solutions. Solution of a pair of linear equations in two variable algebraically- by substitution, by elimination and by cross multiplication method. Simple problems on equations reducible reducible to linear equations.

3. Quadratic Equations :

Standard from of quadratic equation $ax2+bx+c=0$, $(a=0)$. Solutions of quadratic equations (only real roots) by factorization and by using quadratic formula. Relationship between discriminant and nature of roots.

4. Arithmetic Progressions :

Motivation for studying Arithmetic Progression Derivation of the nth term and sum of the first n terms of A.P.

Unit II : Coordinate Geometry

1. Lines (in two-dimension)

Review : Conceptions of coordinate geometry, graphs of linear equations. Distance formula. Section formula (internal division). Area of a triangle.

Unit III : Geometry

1. Triangles

Definitions, examples, counter examples of similar triangles.

i) (Prove) If a line is drawn parallel to one side of triangle to intersect the other two sides in distinct points, the other two sides are divided inthe same ratio.

ii) (Motivate) If a line divides two sides of a triangle in the same ratio, the line is parallel to the third side.

iii) (Motivate) It in two triangles, the corresponding angles are equal, their corresponding sides are proportional and the triangles are similar.

iv) (Motivate) If the corresponding sides of two triangles are proportional, their corresponding

angles are equal and the two triangles are similar.

v))(Motivate) If one angle of triangle is equal to one angle of another triangle and the sides including these angles are proportional, the two triangles are similar.

vi) (Motivate) If a perpendicular is drawn from the vertex of the right angle of a right triangly to the hypotenuse, the triangles on each side of the perpendicular are similar to the whole triangle and to each other.

vii) (Prove) The ratio of the areas of two similar triangles is equal to the ratio of the squares of their corresponding sides. (only theorem)

viii) (Prove) In a right triangle, the square on the hypotenuse is equal to the sum of the squares on the other two sides.

ix) (Prove) In a triangle, if the square on one side is equal to sum of the squares on the other two sides the angles opposite to the first side is a right angle.

Excluded problems based on the application of article 7 and 8 above.

2. Circles

Tangent to a circle at point of contact

(i) (Prove) The tangent at any point of a circle is perpendicular to the radius through the point of contact.

(ii) (Prove) The length of tangents drawn from an external point to a circle are equal.

3. Constructions

(i) Division of a line segment in a given ratio (internally)

ii) Tangents to a circle from a point outside it.

iii) Construction of a triangle similar to a given triangle.

Unit IV : Trigonometry

1. Introduction to Trigonometry

Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (well defined), motivate the ratios whichever are defined at 0^0 and 90^0 . Values of the trigonometric ratios of 30^0, 45^0 and 60^0. Relationships between the ratios. Trigonometric ratios of compelemtary angles.

2. Heights and Distances : Angle of elevation, Angle of Depression

Simple problems on heights and distances. Problems should no involve more than two right triangles. Angles of elevation / depression should be only 30^0, 45^0, 60^0.

Unit V : Mensuration

1. Areas Related to Circles :

Motivate the area of circle, area of sectors and segments of a circle. Problems based on areas and perimeter / circumference of the above plane figures. (In calculating area of segment of a circle. problems should be restricted to central angle of 60^0, 90^0).

2. Surface Areas and Volumes :

i) Surface areas and volumes of combinations of any two of the following : cubes, cuboids, spheres, hemispheres and right circular cylinders / cones.

ii) 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).

Unit VI : Statistics and Probability

1. Statistics : Mean, median and mode of grouped data (bimodal situation to be avoided).

2. Probability

Classical definition of probability. Simple problems on finding the probability of an event.

Blue Print of Questions : Class X : Mathematics (Standard) : 80 Marks

Unit	Chapter	Topics	VSA 1mark	SA 2Marks	LA-I 3Marks	LA-II 4Marks	Total
I	Algebra	Polynomials (5 marks)	1	2	--	--	22
		Pair of linear equations in two variables (7)	1	1	--	1	
		Quadratic equations (5)	2	--	1	-	
		Arithmetic Progession (5)	2	--	1	--	
II	Co-ordinate Geometry	Lines (in two dimensions)	4	--	1	--	07
III	Geometry	Triangles (6)	2	--	--	1	15
		Circles (5)	1	--	--	1	
		Constructions (4)	--	--	--	1	
IV	Trigonometry	Introduction to Trigonometry(7)	2	1	1	--	12
		Height and distance (5)	--	1	1	--	
V	Mensuration	Areas Related to circles (3)	--	--	1	--	10
		Surface areas and volumes (7)	3	--	--	1	
VI	Statistics and Probability	Statistics (8)	1	--	1	1	14
		Probability (6)	1	1	1	--	
Total Nos. of Questions			20	06	08	06	40
Total Marks			20	12	24	24	80

Reduced Syllabus : Class X : Mathematics (Basic) : 80 Marks : 2020-2021

Unit / Chapter	Deleted Topics
Unit -1 : Number System	
1. Real Number	1.2- Euclid's Division lemma
	1.5- Revisiting Rational Numbers & Their Decimal Expansion
Unit-II : Algebra	
1. Polynomials	2.4 Division algorithm for Polynomial
2. Pair of linear equations in two variables	3.3 Graphical Method of Solution of a pair of Linear Equations
	3.5 Equations Reducible to a pair of Linear Equations in two variables.
3. Quadratic Equations	Situational Problems based on quadratic equations related on to day to day activities to be incorporated.
	4.4 Soultion of a Quadratic equation. by completing the square.
4. Arithmetic Progression	Sum of first terms of an AP
Unit-III : Coordinate Geometry	
1. Lines (In two dimensions)	No Portion Deleted
Unit-IV : Geometry	
1. Triangles	Application of theorem 6.6 and Theorm 6.9 of Text book
2. Circles	Exercise 10.2
3. Constructions	No portion deleted
Unit-V : Trigonometry	
1. Introduction to Trigonometry	No portion deleted
2. Trigonometric Identities	Totally deleted
3. Height & Distances	No portion deleted
Unit-VI : Mensuration	
1. Areas related to circles	1) Areas of sector and segment of a circle
	2) Areas of combinations of plane figures.
2. Surface areas and volumes	13.3 Volume of a combination of solids.
	13.4 conversion of solid from one shape to another 13.5 Frustum of a cone
Unit-VII : Statistics and Probability	
1. Statistics	* Cumulative frequency graph
2. Probability	No portion deleted

Blue Print of Questions : Class X : Mathematics (Basic) : 80 Marks :2020-21

Unit	Chapter	Topics	VSA 1mark	SA 2marks	LA-I 3marks	LA-II 4marks	Total marks
I	Real Number	Fundamental theoram of Arithmetic Revisiting Irrational Number	1	1	1	--	06
II	Algebra	Polynomials	1	1	--	--	20
		Pair of linear equations in two variables	1	1	--	1	
		Quadratic equations	2	--	1	--	
		Arithmetic Progession	2	--	1	--	
III	Co-ordinate Geometry	Lines (in two dimensions)	3	--	1	--	06
IV	Geometry	Triangles	2	--	--	1	15
		Circles	1	--	--	1	
		Constructions	--	--	--	1	
V	Trigonometry	Introduction to Trigonometry	2	1	1	--	12
		Height and distance	--	1	1	--	
VI	Mensuration	Areas Related to circles	1	--	1	--	10
		Surface areas and volumes	2	--	--	1	
VII	Statistics and Probability	Statistics	1	--	--	1	11
		Probability	1	1	1	--	
	Total Nos. of Questions		20	06	08	06	40
	Total Marks		20	12	24	24	80