

**DELETED PORTION  
MATHEMATICS - 041  
CLASS XI**

UNIT/ CHAPTER	SYLLABUS REDUCED
<b>Unit- I: Sets and Functions</b>	
1.Sets	<input type="checkbox"/> Difference of sets. <input type="checkbox"/> Complement of a set. Properties of Complement
2.Relations & Functions	<input type="checkbox"/> (up to $R \times R \times R$ ). <input type="checkbox"/> Sum, Difference, product and quotients of functions
3. Trigonometric Functions	<input type="checkbox"/> General Solutions of trigonometric equations of the type $\sin y = \sin a$ , $\cos y = \cos a$ and $\tan y = \tan a$ .
<b>Unit II: Algebra</b>	
1.Principle of Mathematical Induction	<input type="checkbox"/> Delete full chapter
2.Complex Numbers and Quadratic Equations	<input type="checkbox"/> Polar representation of complex numbers. <input type="checkbox"/> Square root of a complex number.
3.Linear Inequalities	Nil
4. Permutations and Combinations	<input type="checkbox"/> Derivation of formulae for ${}^n P_r$ and ${}^n C_r$
5.Binomial theorem	<input type="checkbox"/> Delete full Chapter
6. Sequence and Series	<input type="checkbox"/> Formulae for the following special sums $\sum k, \sum k^2, \sum k^3$ .
<b>Unit III: Coordinate geometry</b>	
1.Straight Lines	<input type="checkbox"/> Shifting of origin. <input type="checkbox"/> Equation of family of lines passing through the point of intersection of two lines.
2 Conic sections	<input type="checkbox"/> a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section.
3.Introduction to Three-dimensional Geometry	Nil
<b>Unit-IV : Calculus</b>	
1.Limits and Derivatives	Nil
<b>Unit-V : Mathematical Reasoning</b>	
1.Mathematical Reasoning	<input type="checkbox"/> Delete full chapter
<b>Unit-VI: Statistics and Probability</b>	

1. Statistics	<input type="checkbox"/> Analysis of frequency distributions with equal means but different variances.
2. Probability	<input type="checkbox"/> Axiomatic (set theoretic) probability, connections with other theories of earlier classes

## CLASS XII

UNIT/CHAPTER	SYLLABUS REDUCED
<b>Unit1: Relations and Functions</b>	
1. Relations and Functions	<input type="checkbox"/> composite functions, inverse of a function.
2. Inverse Trigonometric Functions	<input type="checkbox"/> Graphs of inverse trigonometric functions <input type="checkbox"/> Elementary properties of inverse trigonometric functions
<b>Unit2: Algebra</b>	
1. Matrices	<input type="checkbox"/> existence of non-zero matrices whose product is the zero matrix. <input type="checkbox"/> Concept of elementary row and column operations. <input type="checkbox"/> proof of the uniqueness of inverse, if it exists.
2. Determinants	<input type="checkbox"/> properties of determinants <input type="checkbox"/> Consistency, inconsistency and number of solutions of system of linear equations by examples,
<b>Unit-III: Calculus</b>	
1. Continuity and Differentiability	<input type="checkbox"/> Rolle's and Lagrange's Mean Value Theorems (without proof) and their geometric interpretation.
2. Applications of Derivatives	<input type="checkbox"/> rate of change of bodies, use of derivatives in approximation <input type="checkbox"/>
3. Integrals	$\int \sqrt{ax^2 + bx + c} dx,$ $\int (ax + b)\sqrt{ax^2 + bx + c} dx$ <input type="checkbox"/> Definite integrals as a limit of a sum
4. Applications of the Integrals	<input type="checkbox"/> Area between any of the two above said curves
5. Differential Equations	<input type="checkbox"/> formation of differential equation whose general solution is given. <input type="checkbox"/> Solutions of linear differential equation of the type: $\frac{dx}{dy} + px = q,$ where p and q are functions of y or constants.
<b>Unit-IV: Vectors and Three-Dimensional Geometry</b>	
1. Vectors	scalar triple product of vectors.
2. Three - dimensional Geometry	<input type="checkbox"/> Angle between (i) two lines, (ii) two planes, (iii) a line and a plane

<b>Unit-V: Linear Programming</b>	
1. Linear Programming	<input type="checkbox"/> mathematical formulation of L.P. problems <input type="checkbox"/> (unbounded)
<b>Unit-VI: Probability</b>	
1. Probability	<input type="checkbox"/> mean and variance of random variable. Binomial probability distribution.