



DELHI PUBLIC SCHOOL (JOKA) SOUTH KOLKATA
SYLLABUS - 2020-2021
CLASS XI
MATHEMATICS

PERIODIC TEST - I

Unit 1 –Sets

Unit 2- Relations and Functions

Unit 3-Trigonometric Functions

MIDTERM EXAMINATION

Unit 1 –Sets

Unit 2- Relations and Functions

Unit 3-Trigonometric Functions

Unit 4-Complex Numbers and Quadratic Equations

Unit 5-Linear Inequalities

Unit 6- Straight Lines

PERIODIC TEST – II

Unit 7- Permutations and Combinations

Unit 8- Sequence and Series

Unit 9- Conic Sections

Unit 10 Introduction to Three-dimensional Geometry

ANNUAL EXAMINATION

Unit 1 –Sets

Unit 2- Relations and Functions

Unit 3-Trigonometric Functions

Unit 4-Complex Numbers and Quadratic Equations

Unit 5-Linear Inequalities

Unit 6- Straight Lines

Unit 7- Permutations and Combinations

Unit 8- Sequence and Series

Unit 9- Conic Sections

Unit 10- Introduction to Three-dimensional Geometry

Unit 11-Limits and Derivatives

Unit 12- Statistic

Unit 13 Probability

DELETED PORTION MATHEMATICS	
UNIT/CHAPTER	SYLLABUS REDUCED
Unit-I: Sets and Functions	
1. Sets	<ul style="list-style-type: none"> ▫ Difference of sets. ▫ Complement of a set. Properties of Complement
2. Relations & Functions	<ul style="list-style-type: none"> ▫ (upto $R \times R \times R$). ▫ Sum, Difference, product and quotients of functions.
3. Trigonometric Functions	<ul style="list-style-type: none"> ▫ General Solutions of trigonometric equations of the type $\sin y = \sin a$, $\cos y = \cos a$ and $\tan y = \tan a$.
Unit-II: Algebra	
1. Principle of Mathematical Induction	<ul style="list-style-type: none"> ▫ Delete full chapter
2. Complex Numbers and Quadratic Equations	<ul style="list-style-type: none"> ▫ Polar representation of complex numbers. ▫ Square root of a complex number.
3. Linear Inequalities	Nil
4. Permutations and Combinations	<ul style="list-style-type: none"> ▫ Derivation of formulae for ${}^n P_r$ and ${}^n C_r$
5. Binomial theorem	<ul style="list-style-type: none"> ▫ Delete full Chapter
6. Sequence and Series	<ul style="list-style-type: none"> ▫ Formulae for the following special sums $\sum k$, $\sum k^2$, $\sum k^3$.
Unit-III: Coordinate geometry	
1. Straight Lines	<ul style="list-style-type: none"> ▫ Shifting of origin. ▫ Equation of family of lines passing through the point of intersection of two lines.
2. Conic sections	<ul style="list-style-type: none"> ▫ 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

Unit-IV: Calculus	
1.Limits and Derivatives	Nil
Unit-V:Mathematical Reasoning	
1.Mathematical Reasoning	▯ Delete full chapter
Unit-VI: Statistics and Probability	
1. Statistics	▯ Analysis of frequency distributions with equal means but different variances.
2. Probability	▯ Axiomatic (set theoretic) probability, connections with other theories of earlier classes