



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

PERIODIC TEST - I

Unit 1-Inverse Trigonometric Functions

Unit 2-Matrices

Unit 3- Determinants

Unit 4- Continuity and Differentiability

Unit 5-Application of Derivatives

MID TERM EXAMINATION

Unit 1-Inverse Trigonometric Functions

Unit 2-Matrices

Unit 3- Determinants

Unit 4- Continuity and Differentiability

Unit 5-Application of Derivatives

Unit 6-Integrals

Unit 7- Application of integrals

Unit 8 –Relations and Functions

PERIODIC TEST – II

Unit 9-Differential Equations

Unit 10-Vectors

Unit 11-Three-Dimensional Geometry

Unit 12- Linear Programming

Unit 13- Probability

**** IN CBSE CLASS - XII EXAMINATION THE ENTIRE YEAR'S SYLLABUS WILL BE ASSESSED.**

DELETED PORTION

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