

**N. C. JINDAL PUBLIC SCHOOL, PUNJABI BAGH, NEW DELHI-110026, ANNUAL CURRICULUM, 2024-25**

Class-XI	Subject-(041) Mathematics	Subject Teacher(Prepared by): SKS				
Preferred Text Book /Material	Chapter's Name	Chapter Topic/Sub Topic	Term	StartDate	End Date	No of Pds
Mathematics	Sets	Sets and their representations, Empty set, Finite and infinite sets ,Equal sets,	I	7/1/2024	7/6/2024	6
Textbook for		Subsets, Subsets of a set of real numbers especially intervals (with notations)				
Class XI		Universal set. Venn diagrams. Union and Intersection of sets. Difference of sets				
Published by		Complement of a set. Properties of Complement.				
NCERT						
	<i>Relation and Functions</i>	Ordered pairs. Cartesian product of sets. Number of elements in the Cartesian product of two finite sets. Cartesian product of the set of reals with itself (upto $R \times R \times R$ ).	I	7/8/2024	7/12/2024	5
Mathematics		Definition of relation, pictorial diagrams, domain, co-domain and range of a relation.				
Exemplar		Function as a special type of relation. Pictorial representation of a function, domain,				
Problem		co-domain and range of a function. Real valued functions, domain and range of these				
for Class XI		functions, constant, identity, polynomial, rational, modulus, signum, exponential,				
Published by		logarithmic and greatest integer functions, with their graphs. Sum, difference,				
NCERT		product and quotients of functions.				
Mathematics						
<i>Lab Mannual</i>	<i>Trigonometric Functions</i>	Positive and negative angles. Measuring angles in radians and in degrees and conversion from one measure to another. Definition of trigonometric functions with the help of unit circle .Truth of the identity $\sin^2x + \cos^2x = 1$ , for all x.	I	7/15/2024	7/20/2024	5
for Class XI		Signs of trigonometric functions				
Published by						
NCERT						
		Domain and range of trigonometric functions and their graphs. Expressing $\sin(x \pm y)$ and $\cos(x \pm y)$ in terms of $\sin x$ , $\sin y$ , $\cos x$ & $\cos y$ and their simple applications.	I	7/22/2024	7/26/2024	5
		Deducing identities Identities related to $\sin^2x$ , $\cos^2x$ , $\tan^2 x$ , $\sin^3x$ , $\cos^3x$ and $\tan^3x$				
	<i>Complex Nos &amp; Quadratic Equations</i>	Inroduction, Need for complex numbers, especially $\sqrt{-1}$ , to be motivated by inability to solvesome of the quadratic equations. Algebraic properties of complex numbers. Argand plane	I	7/29/2024	8/3/2024	6

	<i>Linear Inequality</i>	Linear inequalities. Algebraic solutions of linear inequalities in one variable and	I	8/5/2024	8/9/2024	5
	<i>Revision</i>	their representation on the number line, Revision for First Periodic Test				
	<i>Sequence &amp; Series</i>	Arithmetic Mean (A.M.) Geometric Progression (G.P.), general term of a G.P	I	8/12/2024	8/17/2024	6
		sum of n terms of a G.P., infinite G.P. and its sum, geometric mean (G.M.),	I	8/20/2024	8/23/2024	4
		relation between A.M. and G.M				
	<i>Statistics</i>	Measures of Dispersion: Range, Mean deviation, variance and standard deviation of	I	8/27/2024	8/30/2024	4
		ungrouped/grouped data.				
	<i>Practicals &amp; Revision</i>	Practical Examination & Revision for Half yearly Examination 2024-25	I	9/2/2024	9/6/2024	5
	<i>Revision</i>	Revision	I	9/9/2024	9/11/2024	3
	<i>Half yearly Exam</i>	Half yearly Examination 2024-2025	I	9/13/2024	9/27/2024	HY
	<i>Permutations &amp; Combinations</i>	Fundamental principle of counting. Factorial n. (n!) Permutations and combinations,	II	9/30/2024	10/5/2024	6
		derivation of Formulae for nPr and nCr and their connections, simple applications.				
	<i>Binomial Expansion</i>	Historical perspective, statement and proof of the binomial theorem for positive	II	10/7/2024	10/19/2024	13
		integral indices. Pascal's triangle, simple applications.				
	<i>Straight lines</i>	Brief recall of two dimensional geometry from earlier classes. Slope of a line and	II	10/21/2024	10/25/2024	5
		angle between two lines.				
		Various forms of equations of a line: parallel to axis, point -slope form, slope-	II	11/4/2024	11/8/2024	5
		intercept form, two-point form, intercept form, Distance of a point from a line				
	<i>Revision</i>	Revision for Second Periodic Test & Miscellaneous Questions	II	11/11/2024	11/16/2024	5
	<i>Conic Section</i>	Sections of a cone: circles, ellipse, parabola, hyperbola, a point, a straight line and	II	11/18/2024	11/22/2024	5
		a pair of intersecting lines as a degenerated case of a conic section.				

		Standard equations and simple properties of parabola, ellipse and hyperbola.	II	11/25/2024	11/30/2024	6
		Standard equation of a circle.Miscellaneous Examples				
	Introduction to 3-D Geometry	Coordinate axes and coordinate planes in three dimensions. Coordinates of a point. Distance between two points.	II	12/2/2024	12/7/2024	6
	Limit & Derivative	Derivative introduced as rate of change both as that of distance function and geometrically.Intuitive idea of limit. Limits of polynomials and rational functions trigonometric, exponential and logarithmic functions.	II	12/9/2024	12/12/2024	4
		Definition of derivative relate it to slope of tangent of the curve, derivative of sum, difference, product and quotient of functions.	II	12/16/2024	12/21/2024	6
		Derivatives of polynomial and trigonometric functions.Miscellaneous Questions	II	12/23/2024	12/31/2024	
	<i>Probability</i>	Events; occurrence of events, 'not', 'and' and 'or' events, exhaustive events, mutually exclusive events,, Axiomatic (set theoretic) probability, connections with other theories of earlier classes. Probability of an event, probability of 'not', 'and' and 'or' events	II	1/16/2025	1/24/2025	
	<i>Practicals &amp; Revision</i>	Practical Examination & Revision for Annual Examination 2024-25	II	1/27/2025	1/31/2025	5
	<i>Revision</i>	Chapterwise Revision for Annual Examination 2024-25	II	2/3/2025	2/15/2025	
	Annual Exam	Annual Examination 2024-25	II	2/17/2025	2/27/2025	AE
	<b>Prepared by:</b>	SKS:Sig				
	Sub. Co-ordinator:	KKJ:Sign.				

**N. C. JINDAL PUBLIC SCHOOL,PUNJABI BAGH, NEW DELHI-110026**

**Marking Scheme for First Periodic Examination 2024-25**

**Class-XI Sub:-Mathematics (041) Time:-45 minutes**

Sl.No.	Chapter/ Topic	Max.Marks
1	Sets	11
2	Relation & Functions	9
<b>Total</b>		<b>20</b>

**Marking Scheme for Half Yearly Examination 2024-25**

**Class-XI Sub:-Mathematics (041) Time:-45 minutes**

Sl.No.	Chapter/ Topic	Max.Marks
1	Sets	12
2	Relation & Functions	9
3	Trigonometric Functions	16
4	Complex Nos & Quadratic Equatons	8
5	Linear Inequality	10
6	Sequence&Series	15
7	Statictics	10
<b>Total</b>		<b>80</b>

**Marking Scheme for Second Periodic Examination 2024-25**

**Class-XI Sub:-Mathematics (041) Time:-45 minutes**

Sl.No.	Chapter/ Topic	Max.Marks
1	Permutation & Combination	13
2	Binomial Theorem	07
<b>Total</b>		<b>20</b>

**Marking Scheme for Third Periodic Examination 2024-25**

**Class-XI Sub:-Mathematics (041) Time:-45 minutes**

Sl.No.	Chapter/ Topic	Max.Marks
1	Straight lines	20

**Marking Scheme for Annual Examination 2024-25**

**Class-XI Sub:-Mathematics (041) Time:-45 minutes**

S.No.	Chapter/ Topic	Max.Marks
1	Set	4
2	Relation and functions	4
3	Trigonometric functions	9
4	Complex Nos & Quadratic Equatons	4
5	Linear Inequality	6
6	Permutation & Combination	5
7	Binomial Theorem	4
8	Sequence&Series	4
9	Straight lines	8
10	Conic Section	9
11	Introduction of 3D	4
12	Limit & Derivative	9
13	Statictics	4
14	Probability	6
<b>Total</b>		<b>80</b>

**Co-ordinator Name-KKJ**  
**Subject Teacher Name: SKS**  
**Subject Teacher Name: KKJ**

**Sign.**  
**Sign.**  
**Sign.**

**N.C. JINDAL PUBLIC SCHOOL**  
**CLASS: -XI (2024-2025)**  
**MATHEMATICS (041)**  
**Internal Assessment Max. Marks: 20**  
**Evaluation Criteria**

The weightage is as under

<b>Periodic Test(Best 2 out of 3 test conducted)</b>	<b>10 Marks</b>
<b>The activity performed by the student throughout the year and record keeping:</b>	<b>5 Marks</b>
<b>Assessment of the activity performed during the year end test:</b>	<b>3 Marks</b>
<b>Viva-Voce:</b>	<b>2 Marks</b>

**Note: For activities NCERT Lab Manual may be referred.**

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