

**KLE ENGLISH MEDIUM SCHOOL**  
**JULE SOLAPUR**  
**GRADE- XII SYLLABUS SPLIT 2023-24**  
**PERIODIC TEST - II AND CBSE BOARD EXAM**

**MATHEMATICS**

SR. NO	MONTH	UNIT / SUBUNIT	VALUES	ACTIVITY/PROJECT	EXAM
1	April	<b>Relations and Functions</b>	To develop disciplinary value	Work sheet/Assignment	
		Types of relations			
		Types of functions			
		Composition of Functions and invertible functions			
		Binary operations			
2	April	<b>Matrices</b>	Develops social value, disciplinary value	Work sheet/Assignment	
		Matrix			
		Types of Matrices			
		Operations on Matrices			
		Transpose of a matrix			
		Symmetric and skew symmetric Matrices			
		Elementary operation of a matrix			
invertible matrices					
3	June	<b>Determinants</b>	Develops social value, disciplinary value	Work sheet/Assignment	
		Determinants			
		Properties of determinants			
		Area of a triangle			
		Minors and Cofactors			
		Adjoint and Inverse of a matrix			
Applications of Determinants and Matrices					

4	June	<b>Inverse Trigonometric functions</b>	Skills of handling instruments and accuracy. Develops concentration skills	Work sheet/Assignment	
		Basic concepts			
		Properties of inverse trigonometric functions			
5	July	<b>Continuity and Differentiability</b>	Develops concentration skills, attention and social values	Work sheet/Assignment	
		Continuity			
		Differentiability			
		Exponential and Logarithmic functions			
		Logarithmic Differentiation			
		Derivatives of functions in parametric forms			
		Second order derivatives			
Mean value theorem					
6	July/August	<b>Application of Derivatives</b>	Develops concentration skills	Work sheet/Assignment	
		Rate of change of quantities			
		Increasing and decreasing functions			
		Tangents and Normals			
		Approximations			
		Maxima and Minima			
7	August/September	<b>Integration as an inverse process of</b>	Develops concentration skills	Work sheet/Assignment	PERIODIC TEST -II
		Methods of integration			
		Integrals of some particular functions			
		Integration of Partial Fractions			
		Definite Integral			
		Fundamental Theorem of Calculus			
		Evaluation of Definite Integrals by substitution			
		Some properties of Definite Integrals			

8	October	<b>Applications of Integrals</b>	Develops concentration skills	Work sheet/Assignment	
		Area under Simple curves			
		Area between Two curves			
9	December	<b>Three dimensional geometry</b>	Develops concentration skills. Develops recreational values	Work sheet/Assignment	
		Direction of cosines and Direction Ratios of a line			
		Equation of a line in Space			
		Angle between Two lines			
		Shortest distance between 2 lines			
		Plane			
		Coplanarity of 2 lines			
		Angle between 2 Planes			
		Distance of a point from a plane			
Angle between a line and a plane					
10	November	<b>Differential Equations</b>	Develops concentration skills. Develops recreational values	Work sheet/Assignment	PERIODIC TEST -II
		Basic concepts			
		General and particular Solutions of a Differential			
		Formation of a Differential Equation whose General Methods of Solving First order , First degree			
11	November	<b>Vector Algebra</b>	Develops concentration skills. Develops recreational values	Work sheet/Assignment	PERIODIC TEST -II
		Some basic concepts			
		Types of vectors			
		Addition of Vectors			
		Multiplication of a vector by a scalar			
Product of 2 vectors					
12	December	<b>Linear programming</b>	Develops concentration skills	Work sheet/Assignment	
		Linear programming problem and its Mathematical Formulation			
		Different types of Linear programming problems			

13	December	<b>Probability</b>	Develops concentration skills and logical thinking	Work sheet/Assignment	
		Conditional Probability			
		Multiplication theorem on probability			
		Independent Events			
		Baye's Theorem			
		Random variables and it's probability Distributions			
		Bermoulli trials and Binomial distribution			
Jan/ Feb	<b>REVISION OF ALL THE CHAPTERS FROM 1 TO 13 FOR THE CBSE BOARD EXAM</b>				