## N. C. JINDAL PUBLIC SCHOOL, PUNJABI BAGH, NEW DELHI-110026, ANNUAL CURRICULUM, 2024-2025

Class-XII	Subject-Applied Mathematics(241)	Subject Teacher(Prepared by): KKJ		Designation: PGT		
Preferred Text Book				No of		No of
/Material	Chapter's Name	Chapter Topic/Sub Topic	Term	StartDate	End Date	Pds.
Applied	Matrices	Introduction, Type, Operation, Transpose , Inverse of	Ι	01-04-2024	06-04-2024	8
Mathematics		Matrices and their uniqueness, Symmetric & Skew				
Grade-XII		Symmetric of Matrices				
CBSE Publication						
	Determinants	Introduction of Determinants and their simple	Ι	08-04-2024	19-04-2024	11
Mathematics Lab	Inverse of Matrix	properties ,Area of a triangle				
Mannual Class XII	Solution of System	Minors, cofactors, Adjoint and inverse of Matrices				
Published by NCERT	of Equation	Solution of System of Equation by Cramer's &				
		Matrix Method				
	Differentiation	Differentiation of Implicit & Parametric function	Ι	22-04-2024	26-04-2024	7
		Differentiation of Second & higher order Derivative				
	Application of	Introduction of Rate Measure , Tangents & Normal	Ι	29-04-2024	03-05-2024	7
	Differentiation	Marginal cost & Marginal Revenue				
	Revision	Revision for First PeriodicTest 2024-25	Ι	06-05-2024	10-05-2024	7
	Application of	Increasing & Decreasing functions and Application	Ι	13-05-2024	17-05-2024	7
	Differentiation					
		Maxima & Minima of functions and Application	Ι	01-07-2024	06-07-2024	8
	Numbers, Quantifica-	Modulo Arithmetic & conruence Modulo	Ι	08-07-2024	12-07-2024	7
	tion and Numerical					

Applications	Alligation and Mixture ,Real life problem like Boats		15-07-2024	20-07-2024	7
	and Stream				
	Pipes and Cistens, Race & Games, Numerical	1	22-07-2024	26-07-2024	7
	Inequalities.				
Probability	Probability distribution of Random and discreate	1	29-07-2024	03-08-2024	7
Distributions	variables , Mathematical Expectation & Variance				
Revision	Revision for PT-III Examination 2024-25	1	05-08-2024	09-08-2024	7
	Binomial Ditributions and its Mean ,Variance &S.D	I	12-08-2024	17-08-2024	7
	Poison Ditributions and its Mean & Variance				
	Normal Ditributions and its evaluation of Standard	I	20-08-2024	23-08-2024	6
	Normal variate, Area relation of Mean & SD				
Index Number and	Chronological Data,Component of Time Series & its	1	27-08-2024	30-08-2024	6
Time Based Data	analysis for univariate data				
	Secular Trend & Method of measuring trend .				
			<u>.</u>		
Linear Programming	Introduction ,Formation and Graphical solution of	1	02-09-2024	06-09-2024	6
	LPP & Revision of Second PeriodicTest				
Revision	Revision for PT-III Examination 2024-25	1	09-09-2024	11-09-2024	5
Integrals	Introduction, Method of Integration, Integrals of		13-09-2024	27-09-2024	12
	Particular function by Substitution, by Partial				
	Fraction & by Parts, Introduction of Defnite Integral				

MATHEMATICS CO-ORD	INATOR : KKJ				
Prepared by: KKJ	Sign.				
 Revision	Revision for Pre- Board -2 Examination 2024-25	Ш	09-12-2024	12-12-2024	6
	•				
Revision	Revision for Pre- Board -1 Examination 2024-25		11-11-2024	16-11-2024	7
-	Statistical interference and t-Test				
Inferential Statistics	Population and Sample, parameter and Statistics		04-11-2024	08-11-2024	6
		1			
Mathematics	Return,CAGR and Linear method of Depreciation				
Financial	Perpetuity, Sinking Funds, Calculation of EMI and		21-10-2024	25-10-2024	7
and Modeling	, solution & application of Differential equations				
Differential equations	Introduction, Concept of Degree ,Order,Formulation		07-10-2024	19-10-2024	11
incegrais					
Integrals	mental Theorem of Calculus C S & P S		23 03 2021		,
Application of	Introduction. Area under simple curve using Funda-	1	30-09-2024	05-10-2024	7
	titution Evaluation of Defnite Integrals by Property				
	Evaluation of Defnite Integrals by Defnition & Subs-				

	Syllabus Planning for Firs	st Periodic Examination 2024-25				
Class-XII Sub:-Applied Wathematics(241) Time:- 45 minutes						
SL No. Chapter / Topic Max Marks						
1	Matrices & Determinants	20				
	Syllabus Planning for Seco	nd Periodic Examination 2024-25				
	Class-XII Sub:-Applied Math	ematics(241) Time:- 45 minutes				
	Mark	king Scheme				
SI.No.	Chapter/ Topic	Max.Marks				
1	Differentiation	7				
2	Applications of Differentiation	13				
	Total	20				
	•					
	Syllabus Planning for Thir	d Periodic Examination 2024-25				
Class	s-XII Sub:-Applied Mathema	itics(241) Time:-1 hours 30 minutes				

## Marking Scheme

SI.No.	Chapter/ Topic	Max.Marks
1	Numbers & its Application	10
2	Probability Distributions	13
3	Index Nos & Time based data	9
4	Linear Programming	8
	Total	40

## Syllabus Planning for Pre Board -1& 2 Examination 2024-25

Clas	s-XII Sub:-Applied Mathematics(24	1) Time:-1 hours 30 minutes			
Marking Scheme					
Sl.No.	Chapter/ Topic	Max.Marks			
1	Numbers, Quantification &	11			
1	Numerical Application	11			
2	Algebra	10			
3	Calculus	15			
4	Probability Distributions	10			
5	Inferential Statistics	5			
6	Index Numbers& Time based data	6			
7	Financial Mathematics	15			
8	Linear Programming	8			
	Total	80			
	· · · · · · · · · · · · · · · · · · ·				

Prepared by: KKJ	Sign.
MATHEMATICS CO-ORDINATOR : KKJ	

# N. C. JINDAL PUBLIC SCHOOL, PUNJABI BAGH, NEW DELHI-110026 CLASS: -XII (2024-2025) APPLIED MATHEMATICS (241) Internal Assessment Max. Marks: 20 Evaluation Criteria

### Weightage for each area of internal assessment may be as under:

Sl. No.	Area and Weightage	Assessment Area	Marks allocated
1	Project work	Project work and record	5
	(10 marks)	Year-end Presentation/ Viva of the	5
		Project	
2	Practical work	Performance of practical and record	5
	(10 marks)	Year-end test of any one practical	5
Total			

#### **Assessment Plan**

1. Overall Assessment of the course is out of 100 marks.

2. The assessment plan consists of an External Exam and Internal Assessment.

3. External Exam will be of 03 hours duration Pen/ Paper Test consisting of 80 marks.

4. The weightage of the Internal Assessment is 20 marks. Internal Assessment can be a combination of activities spread throughout the semester/ academic year. Internal Assessment activities include projects and excel based practical. Teachers can choose activities from the suggested list of practical or they can plan activities of a similar nature. For data-based practical, teachers are encouraged to use data from local sources to make it more relevant for students.