

**N. C. JINDAL PUBLIC SCHOOL,PUNJABI BAGH, NEW DELHI-110026, ANNUAL CURRICULUM, 2023-2024**

Class-XII	Subject-Applied Mathematics(241)	Subject Teacher(Prepared by): KKJ		Designation: PGT		
Preferred Text Book /Material	Chapter's Name	Chapter Topic/Sub Topic	Term	StartDate	End Date	No of Pds.
Applied Mathematics Grade-XII CBSE Publication	<i>Matrices</i>	Introduction,Type,Operation, Transpose ,Inverse of Matrices and their uniqueness,Symmetric & Skew Symmetric of Matrices	I	18-03-2023	29-03-2023	10
Mathematics Lab <i>Manual Class XII</i>	<i>Determinants</i>	Introduction of Determinants and their simple properties ,Area of a triangle	I	01-04-2023	06-04-2023	5
Published by NCERT	Inverse of Matrix	Minors, cofactors,Adjoint and inverse of Matrices	I	10-04-2023	15-04-2023	7
	Solution of System of Equation	Solution of System of Equation by Cramer's & Matrix Method				
	<i>Differentiation</i>	Differentiation of Implicite & Parametric function	I	17-04-2023	21-04-2023	7
		Differentiation of Second & higher order Derivative	I	24-04-2023	28-04-2023	7
	<i>Application of Differentiation</i>	Introduction of Rate Measure ,Tangents & Normal Marginal cost & Marginal Revenue	I	01-05-2023	06-05-2023	7
	<i>Revision</i>	Revision for First PeriodicTest	I	08-05-2023	12-05-2023	7
	<i>Application of Differentiation</i>	Increasing & Decreasing functions and Application	I	15-05-2023	18-05-2023	6
		Maxima & Minima of functions and Application	I	01-07-2023	07-07-2023	8
	Numbers,Quantifica-	Modulo Arithmetic & congruence Modulo	I	10-07-2023	15-07-2023	8

	<i>tion and Numerical</i>					
	<i>Applications</i>	Alligation and Mixture ,Real life problem like Boats and Stream				
		Pipes and Cistens, Race & Games, Numerical Inequalities.	I	17-07-2023	21-07-2023	7
	<i>Probability</i>	Probability distribution of Random and discrete variables , Mathematical Expectation & Variance	I	24-07-2023	28-07-2023	7
	<i>Distributions</i>					
		Binomial Distributions and its Mean ,Variance &S.D	I	31-07-2023	05-08-2023	8
		Poisson Distributions and its Mean & Variance				
	<i>Revision</i>	Revision for Second PeriodicTest	I	07-08-2023	11-08-2023	7
	<i>Probability</i>	Normal Distributions and its evaluation of Standard	I	14-08-2023	18-08-2023	5
	<i>Distributions</i>					
		Normal variate, Area relation of Mean & SD	I	21-08-2023	25-08-2023	7
	Index Number and	Chronological Data,Component of Time Series & its	I	28-08-2023	02-09-2023	7
	Time Based Data	analysis for univariate data				
		Secular Trend & Method of measuring trend .	I	04-09-2023	08-09-2023	6
	<i>Revision</i>	Revision for Half yearly Examination 2023-24	I	11-09-2023	14-09-2023	6
	<i>Integrals</i>	Introduction,Method of Integration,Integrals of	II	03-10-2023	06-10-2023	6
		Particular function by Substitution,by Partial				
		Fraction & by Parts,Introduction of Definite Integral				

		Evaluation of Definite Integrals by Definition & Substitution				
		Evaluation of Definite Integrals by Property				
	<i>Application of Integrals</i>	Introduction, Area under simple curve using Fundamental Theorem of Calculus, C.S & P.S	II	09-10-2023	13-10-2023	7
	<i>Differential equations and Modeling</i>	Introduction, Concept of Degree ,Order,Formulation ,solution & application of Differential equations	II	16-10-2023	19-10-2023	5
	<i>Linear Programming</i>	Introduction ,Formation and Graphical solution of LPP &Revision of Second PeriodicTest	II	25-10-2023	31-10-2023	7
	Financial Mathematics	Perpetuity, Sinking Funds,Calculation of EMI and Return,CAGR and Linear method of Depreciation	II	02-11-2023	10-11-2023	10
	<i>Revision</i>	Revision for Pre- Board -1 Examination 2023-24	II	16-11-2023	21-11-2023	7
	<i>Inferential Statistics</i>	Population and Sample,parameter and Statistics	II	04-12-2023	06-12-2023	4
		Statistical interference and t-Test				
	<i>Revision</i>	Revision for Pre- Board -2 Examination 2023-24	II	12-12-2023	19-12-2023	5
	<b>Prepared by: KKJ</b>	<b>Co-ordinator Name-PCJ</b>				



**Syllabus Planning for First Periodic Examination 2023-24****Class-XII****Sub:-Applied Mathematics(241)****Time:- 45 minutes****Marking Scheme**

Sl.No.	Chapter/ Topic	Max.Marks
1	<i>Matrices &amp; Determinants</i>	11
	<b>Total</b>	<b>20</b>

**Syllabus Planning for Second Periodic Examination 2023-24****Class-XII****Sub:-Applied Mathematics(241)****Time:- 45 minutes****Marking Scheme**

Sl.No.	Chapter/ Topic	Max.Marks
1	<i>Differentiation</i>	7
2	<i>Applications of Differentiation</i>	13
	<b>Total</b>	<b>20</b>

**Syllabus Planning for Half Yearly Examination 2023-24****Class-XII****Sub:-Applied Mathematics(241)****Time:- 3 hours****Marking Scheme**

Sl.No.	Chapter/ Topic	Max.Marks
1	<i>Matrices &amp; Determinants</i>	19
2	<i>Differentiation</i>	8
3	<i>Applications of Differentiation</i>	11
4	<i>Numbers &amp; its Application</i>	15
5	<i>Probability Distributions</i>	17
6	<i>Index Nos &amp; Time based data</i>	10
	<b>Total</b>	<b>80</b>

**Syllabus Planning for Pre Board Examination 2023-24****Class-XII****Sub:-Applied Mathematics(241)****Time:- 3 hours****Marking Scheme**

Sl.No.	Chapter/ Topic	Max.Marks
1	<i>Numbers, Quantification &amp; Numerical Application</i>	11
2	<i>Algebra</i>	10
3	<i>Calculus</i>	15
4	<i>Probability Distributions</i>	10
5	<i>Inferential Statistics</i>	5
6	<i>Index Numbers &amp; Time based data</i>	6
7	<i>Financial Mathematics</i>	15
8	<i>Linear Programming</i>	8
	<b>Total</b>	<b>80</b>

<b>Co-ordinator Name-PCJ</b>	<b>Sign.</b>
<b>Subject Teacher Name: KKJ</b>	<b>Sign.</b>

**N.C. JINDAL PUBLIC SCHOOL**  
**CLASS: -XII (2023-2024)**  
**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 (10 marks)	Project work and record	5
		Year-end Presentation/ Viva of the Project	5
2	Practical work (10 marks)	Performance of practical and record	5
		Year-end test of any one practical	5
Total			20

**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.
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