

	B	C	D	E	F	G
1	N. C. JINDAL PUBLIC SCHOOL,PUNJABI BAGH, NEW DELHI-110026, ANNUAL CURRICULUM, 2024-25					
2	ed-Mathematic	Subject Teacher(Prepared by): KP		Designation: TGT		
3	Chapter name	Chapter Topic/Sub Topic	Term	StartDate	End Date	No of Pds
4						
5	Binary Numbers	• Express decimal numbers in binary system • Express binary numbers in decimal system	1	7/1/2024	7/6/2024	6
6	Sets	Define set as well-defined collection of objects • Represent a set in Roster form				
7		Identify different types of sets on the basis of number of elements in the set, Differentiate between equal set and equivalence set,subsets,subsets as intervals,venn-diagram,problems using venn diagram		7/8/2024	7/12/2024	5
8						
9	Relations	specific arrangement of elements in a pair, Cartesian product of two sets, the number of elements in a Cartesian product of two sets, relation as a subset of Cartesian product, domain and range of a relation	1	7/15/2024	7/20/2024	5
10						
11	Functions	function using dependent and independent variable, domain, range and co-domain of a given function	1	7/22/2024	7/26/2024	5
12		various types of function,domain,co-domain and range and representation of function graphically				
13	Logarithm and	Relate indices and logarithm /antilogarithm • Find logarithm and antilogarithms of given number •				
14	antilogarithm	Applications of rules of indices • Introduction of logarithm and antilogarithm • Common and Natural logarithm, Laws and properties of logarithms • Enlist the laws and properties of logarithms	1	7/29/2024	8/3/2024	
15		Apply laws of logarithm • Fundamental laws of logarithm , Simple applications of logarithm and antilogarithm • Use logarithm in different application				
16						
17						
18	Quantitative Aptitude	Determine average for a given data	1	8/5/2024	8/9/2024	
19	Angle, Clock	• Evaluate the angular value of a minute • Calculate the angle formed between two hands of clock at given time • Calculate the time for which hands of clock meet				
20						
21	Order	• Determine Odd days in a month/ year/ century • Decode the day for the given date				
22	Work,Work and Dis	• Establish the relationship between work and time • Compare the work done by the individual / group w.r.t. time • Calculate the time taken/ distance covered/ Work done from the given data	1	8/12/2024	8/17/2024	
23						
24	Insurance	• Solve problems based on surface area and volume of 2D and 3D shapes • Calculate the volume/ surface area for solid formed using two or more shapes				
25						
26	Seating Arrangement	Create suitable seating plan/ draft as per given conditions (Linear/circular)				
27		Locate the position of a person in a seating arrangement				
28	Sequence and	• Differentiate between sequence and series , Identify Arithmetic Progression (AP)	1	8/20/2024	8/23/2024	
29	Series	Establish the formulae of finding n th term and sum of n terms , Solve application problems based on AP				
30		Find arithmetic mean (AM) of two positive numbers,G,P,n th term and sum of n terms of a given G.P	1	8/27/2024	8/30/2024	
31		Applications of G.P,Geometric Mean of two positive integers,Problems based on relation between AM and GM, Apply appropriate formulas of AP and GP to solve application				
32						
33	Logical reasoning	Solve logical problems involving odd man out, syllogism, blood relation and coding decoding	1	9/2/2024	9/6/2024	
34		Revision	1	9/9/2024	9/11/2024	3
35		Half yearly Examinations	1	9/13/2024	9/27/2024 HY	
36						
37	Descriptive Statisti	dispersion in a data set , Differentiate between range, quartile deviation, mean deviation and standard deviation, range, quartile deviation, mean deviation and standard deviation for ungrouped and	II	9/30/2024	10/5/2024	
38		grouped data set , Choose appropriate measure of dispersion to calculate spread of data				
39		Skewness and Kurtosis using graphical representation of a data set ,Skewness and Kurtosis of a frequency distribution by plotting the graph , coefficient of Skewness and interpret the results	II	10/7/2024	10/19/2024	
40		Percentile rank and Quartile rank , Percentile and Quartile rank of scores in a given data set				
41		correlation in values of two data sets, Product moment correlation for ungrouped and grouped data	II	10/21/2024	10/25/2024	
42		Karl Pearson's coefficient of correlation • Spearman's rank correlation ,coefficient of correlation				
43	Permutations and	permutation , concept of permutation to solve simple problems ,Combinations,	II	11/4/2024	11/8/2024	
44	Combinations	Differentiate between permutation and combination, formula of combination to solve problems	II	11/11/2024	11/16/2024	5
45	Limits: Limits	limit of a function, problems based on the algebra of limits, continuity of a function,instantaneous rate		11/18/2024	11/22/2024	
46	Continuity,Differentiability	of change, derivative of the functions,derivative of derivative of functions	II	11/25/2024	11/30/2024	6
47		random experiment and sample space with suitable example,different type of event and their probability				
48		concept of conditional probability,problems based on conditional probability	II	12/2/2024	12/7/2024	6
49		total probability, problems based on application of total probability,				
50		Bayes' theorem, practical problems based on Bayes' theorem+ miscellaneous examples	II	12/9/2024	12/12/2024	4
51	Financial Mathema	concept of Interest Rates ,Compare the difference between Nominal Interest Rate, Effective Rate				
52		and real interest rate, Solve Practical applications of interest rate ,Simple Interest and Compound Interest				
53		Annual equivalency rate, effective rate of interest, net present value ,immediate Annuity,	II	12/16/2024	12/21/2024	6
54		, Annuity due and Deferred Annuity •Calculate General Annuity,calculate future value of regular annuity				
55		annuity due •Apply the concept of Annuity in real life				
56		direct and indirect tax, GSI, Goods and Services Tax (SGST) Central Goods and Services Tax (CGST) and	II	12/23/2024	12/31/2024	6
57		Union territory goods and service tax(UTGST), Bills, tariff rates, fixed charge, surcharge, service charge				
58		calculation of electricity bill,water bill and other supply bills +Revision		1/16/2025	1/24/2025	8
59			II			
60	Coordinate	slope and equation of lines in various forms,angle between two lines,perpendicular distance, distance between two	II	1/27/2025	1/31/2025	5
61	Geometry	equation of a circle,problems on equation of a circle,eccentricity of parabola,equation of parabola+revision				
62		Practicals	II	2/3/2025	2/7/2025	5
63	Revision for Annual	Chapterwise Revision for Annual Examination	II	2/10/2025	2/15/2025	6
64	Revision			2/17/2025	2/27/2025	AE
65						
66	Prepared by: KP					
67	Co-ordinator-PSin					

2	Class-XI	Sub:- Applied-Mathematics(241)	Time:-45 minutes
3	Marking Scheme		
4	Sl.No.	Chapter/ Topic	Max.Marks
5	1	<i>Binary numbers</i>	5
6	2	<i>Sets and relations</i>	15
7		Total	20

9	Syllabus Planning for Half Yearly Examination 2024-25		
10	Class-XI	Sub:- Applied-Mathematics (241)	Time:-3 hours
11	Marking Scheme		
12	Sl.No.	Chapter/ Topic	Max.Marks
13	1	<i>Sets and Relations</i>	13
14	2	<i>Binary numbers</i>	4
15	3	<i>Indices and Logarithms</i>	15
16	4	<i>Functions</i>	8
17	5	<i>Sequence and Series</i>	15
18	6	<i>Mathematical reasoning</i>	10
19	7	<i>Numerical Applications</i>	15
20		Total	80

22	Syllabus Planning for Second Periodic Examination 2024-25		
23	Class-XI	Sub:-Applied-Mathematics(241)	Time:-45minutes
24	Marking Scheme		
25	Sl.No.	Chapter/ Topic	Max.Marks
26	1	<i>Statistics</i>	13
27	2	<i>Permutation & Combination</i>	7
28		Total	20

30	Syllabus Planning for Annual Examination 2024-25		
31	Class-XI	Sub:-Applied Mathematics(241)	Time:-3 hours
32	Marking Scheme		
33	Sl.No.	Chapter/ Topic	Max.Marks
34	1	Numbers, Quantification and Numerical Applications	9
35	2	Algebra	15
36	3	Mathematical Reasoning	6
37	4	<i>Calculus</i>	10
38	5	Probability	8
39	6	Descriptive Statistics	12
40	7	<i>Basics of Financial Mathematics</i>	15
41	8	<i>Coordinate Geometry</i>	5
42		Total	80
43	Co-ordinator Name-KK.I		
44	Subject Teacher Name: KP		
45			
46			
47			

APPLIED MATHEMATICS (241)
TERM : I & II
Internal Assessment Max. Marks: 20
Evaluation Criteria

The weightage is as under

Sr. No.	Area and Weight age	Assessment Area	Marks allocated
1	Practical work(10 marks)	Performance of practical and record	5
		Year-end test of any one practical	5
2	Project work(10 marks)	Project work and record	5
		Year-end Presentation/Viva of the Project	5
Total			20

Term I

Practical work(10 marks)

LIST OF ACTIVITY/PRACTICAL

1. To find the number of subsets of a given set and verify that if a

set has number of elements, then the total number of subsets is

2. To represent set theoretic operations using Venn diagrams.
3. To identify a relation and a function.
4. To demonstrate that the Arithmetic mean of two different positive numbers is always greater than the geometric mean.
5. Graph of linear functions.

Term II

Project will be allotted to Student so they understand and develop applicability of data from local source to make it more relevant.