		N C JINDAL PUBLIC SCHOOL		PREPARED BY - KP		
	IED MATH	Chapter Topic/Sub Topic	Term	StartDate	End Date	No of
5	Numbers	● Express decimal numbers in binary system ● Express binary numbers in decimal system	1	7/1/2025	7/3/2025	7
6						
7	ts	·Define set as well-defined collection of objects● Represent a set in Roster form and set builder form				
8		·Identify different types of sets on the basis of number of elements in the set,Differentiate between				
9		equal set and equivalence set,subsets,subsets as intervals,power set elements,venn-diagram	1	7/7/2025	7/11/2025	7
10		problem solving using venn diagram,operations on sets to solve practical problems				
11	tions	specific arrangement of elements in a pair, Cartesian product of two sets, the number of elements				
12		in a Cartesian product of two sets, relation as a subset of Cartesian product,				
13		find domain and range of a relation	1	7/14/2025	7/19/2025	8
14	tions	function using dependent and independent variable, domain, range and co-domain of a given function				
15		various types of function,domain,co-domain and range and representation of function graphically				
16						
17	arithm a	Relate indices and logarithm /antilogarithm ● Find logarithm and antilogarithms of given number ●	1	7/21/2025	7/25/2025	7
18	arithm	Applications of rules of indices ● Introduction of logarithm and antilogarithm ● Common and				
19		Natural logarithm , Laws and properties of logarithms ● Enlist the laws and properties of logarithms				
20		Apply laws of logarithm ● Fundamental laws of logarithm , Simple applications of logarithm and				
21		antilogarithm ● Use logarithm in different application	1	7/28/2025	8/2/2025	8
22	tive Aptitude					
23		● Evaluate the angular value of a minute ● Calculate the angle formed between two hands of clock				
24		at given time ● Calculate the time for which hands of clock meet				
25		● Determine Odd days in a month/ year/ century ● Decode the day for the given date	1	8/4/2025	8/8/2025	7
26	ork and	● Establish the relationship between work and time ● Compare the work done by the individual / group				
27		w.r.t. time ● Calculate the time taken/ distance covered/ Work done from the given data				
28		Create suitable seating plan/ draft as per given conditions (Linear/circular)				
29	nent	Locate the position of a person in a seating arrangement				
30						
31	e and	● Differentiate between sequence and series , Identify Arithmetic Progression (AP)	1	8/11/2025	8/14/2025	5
32		Establish the formulae of finding n th term and sum of n terms , Solve application problems based on AP				
33		Find arithmetic mean (AM) of two positive numbers,G.P,n th term and sum of n terms of a given G.P				
34		Applications of G.P,Geometric Mean of two positive integers,Problems based on relation between				
35		AM and GM, Apply appropriate formulas of AP and GP to solve application				
36						
37	easoning	Solve logical problems involving odd man out, syllogism, blood relation and coding decoding	I	8/18/2025	8/22/2025	7
38						
39	ive	dispersion in a data set , Differentiate between range, quartile deviation, mean deviation and standard				
40	s	deviation, range, quartile deviation, mean deviation and standard deviation for ungrouped and				
41		grouped data set , Choose appropriate measure of dispersion to calculate spread of data	I	8/25/2025	8/29/2025	7
42		Skewness and Kurtosis using graphical representation of a data set ,Skewness and Kurtosis of a frequency				
43		distribution by plotting the graph , coefficient of Skewness and interpret the results				
44		Define Percentile rank ,Percentile rank of scores in a given ungroupe data				
45		Define correlation in values of two data sets,				
46		● Calculate Spearman's rank correlation for ungrouped data ,coefficient of correlation	I	9/1/2025	9/6/2025	7
47			I	9/8/2025	9/11/2025	5
48	rly Examination		I	9/15/2025	9/26/2025	HY
49		Define factorial ,Find factorial of a number,Appreciate how to count without counting				
50	tions	permutation , concept of permutation to solve simple problems ,Combinations,	II	9/30/2024	10/5/2024	4
51	ations	Differentiate between permutation and combination, formula of combination to solve problems	II	10/7/2024	10/19/2024	8
52						
53	: Limits	limit of a function , problems based on the algebra of limits, continuity of a function,	II	10/21/2024	10/25/2024	5
54	y	instantaneous rate of change, derivative of the functions,	II	11/10/2025	11/15/2025	8
55	iation	derivative of function of a function				
56						
57	ity	random experiment and sample space with suitable example,different type of event and their	II	11/17/2025	11/21/2025	7
58		probability,concept of conditional probability,problems based on conditional probability				
59		,Apply reasoning skill to solve problems on conditional probability				
60		+ miscellaneous examples	II	11/24/2025	11/28/2025	7
61						
62	/	concept of Interest Rates ,Compare the difference between Nominal Interest Rate, Effective Rate				
63	atics	and real interest rate, Solve Practical applications of interest rate ,Simple Interest and Compound Interest	II	12/1/2025	12/6/2025	8
64		Annual equivalency rate, effective rate of interest, net present value ,immediate Annuity,				
65		, Annuity due and Deferred Annuity ●Calculate General Annuity,calculate future value of regular annuity		12/8/2025	12/12/2025	7
66		annuity due ●Apply the concept of Annuity in real life	II			
67		direct and indirect tax, GST, Goods and Services Tax (SGST) Central Goods and Services Tax (CGST) and		12/15/2025	12/20/2025	7
68		Union territory goods and service tax(UTGST), Bills, tariff rates, fixed charge, surcharge, service charge	II	12/22/2025	12/31/2025	9
69		calculation of electricity bill,water bill and other supply bills				
70						
71	te	slope and equation of line in various form , angle between the two lines, Find the perpendicular distance		1/16/2026	1/23/2026	8
72	y	from a given point on a line ● Find the distance between two parallel lines				
73		different form of equations of a circle , problems based on applications of circle				
74		parabola and related terms, equation of parabola in standard form	II			
75		Practicals		1/27/2026	1/30/2026	5
76	for Annu	Chapterwise Revision for Annual Examination	II	2/2/2026	2/13/2026	15
77	tion					
78	kam		II	2/23/2026	3/7/2026	AE
79	d by: KP					
80	ordinator	Sign.				

Syllabus Planning for First Periodic Examination 2025-26
Class-XI   Sub:- Applied-Mathematics(241)

	Time:-45 minutes	Marking Scheme
Sl.No.	Chapter/ Topic	Max.Marks
1	Binary numbers	5
2	Sets and relations	15
	Total	20

Syllabus Planning for Half Yearly Examination 2025-26
Class-XI   Sub:- Applied-Mathematics (241)

	Time:-3 hours	Marking Scheme
Sl.No.	Chapter/ Topic	Max.Marks
1	Sets and Relations	12
2	Binary numbers	4
3	Indices and Logarithms	15
4	Functions	6
5	Sequence and Series	10
6	Mathematical reasoning	6
7	Numerical Applications	12
8	Statistics	15
	Total	80

Syllabus Planning for Second Periodic Examination 2025-26
Class-XI   Sub:-Applied-Mathematics(241)

	Time:-45minutes	Marking Scheme
Sl.No.	Chapter/ Topic	Max.Marks
1	limits and continuity	7
2	Permutation & Combination	13
	Total	20

Class-XI   Sub:-Applied Mathematics(241)

	Time:-3 hours	Marking Scheme
Sl.No.	Chapter/ Topic	Max.Marks
1	Numbers, Quantification and Numerical Applications	9
2	Algebra	15
3	Mathematical Reasoning	6
4	Calculus	10
5	Probability	8
6	Descriptive Statistics	12
7	Basics of Financial Mathematics	15
8	Coordinate Geometry	5
	Total	80

Co-ordinator Name-KKJ

Subject Teacher Name: KP

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.