

ACADEMIC PLANNER (APPLIED MATHEMATICS-XI, 2024 - 25)

Month (WD)	Content	Homework & Assignment	Practical/Project Work
July	UNIT – 2 ALGEBRA		
1-15 (12)	Sets		
	Introduction to sets – definition, Representation of sets, Types of sets and their notations, Subsets, Intervals, Venn diagrams, Operations on sets	Exercises of Chapter from CBSE Book	
16-31 (13)	Relations		
	Ordered pairs, Cartesian product of two sets, Relations	Exercises of Chapter from CBSE Book	Project on any one topic from the List of Projects suggested by CBSE
	UNIT- 6 DESCRIPTIVE STATISTICS		
	Data Interpretation: Measure of Dispersion, Skewness and Kurtosis	Exercises of Chapter from CBSE Book	creating pictographs, drawing pie chart, bar graphs using Excel
	Percentile rank and Quartile rank, Correlation		

August	UNIT – 2 ALGEBRA		
1-15 (11)	Sequence and Series		
	Sequence and Series, Arithmetic Progression, Geometric Progression, Applications of AP and GP	Exercises of Chapter from CBSE Book	
16-31 (12)	UNIT – 1 NUMBERS, QUANTIFICATION AND NUMERICAL APPLICATIONS		
	Numbers & Quantification		
	Binary Numbers, Indices, Logarithm and Antilogarithm, Laws and properties of logarithms, Simple applications of logarithm and antilogarithm	Exercises of Chapter from CBSE Book	Collect the data on weather, price, inflation, and pollution. Sketch different types of graphs and analyze the results
September	UNIT – 1 NUMBERS, QUANTIFICATION AND NUMERICAL APPLICATIONS		
1-15(11)	Numerical Applications		
	Averages, Clock, Calendar, Time, Work and Distance, Mensuration, Seating arrangement	Exercises of Chapter from CBSE Book	Calculating average Using Excel
16-30 (12)	HALF YEARLY EXAMINATIONS		

October	UNIT -3 MATHEMATICAL REASONING		
1-15 (9)	Logical reasoning - ●Odd man out ●Syllogism ●Blood relations ●Coding Decoding	Exercises of Chapter from CBSE Book	Prepare a report card using scores of the last four exams and compare the performance using Excel
16-31 (12)	UNIT – 2 ALGEBRA		
	Permutations and Combinations		
	Factorial, Fundamental Principle of Counting, Permutations, Combinations	Exercises of Chapter from CBSE Book	

November	UNIT – 4 CALCULUS		
1-15 (10)	Graphical representation of functions, Concepts of limits and continuity of a function	Exercises of Chapter from CBSE Book	Plot the graph of functions on excel. Study the nature of function at various points, drawing lines of tangents
16-30 (13)	UNIT – 4 CALCULUS		
	Instantaneous rate of change, Differentiation as a process of finding derivative, Derivatives of algebraic functions using Chain Rule	Exercises of Chapter from CBSE Book	creating pictographs, drawing pie chart, bar graphs using Excel
December	UNIT – 5 PROBABILITY		
1-15 (11)	Introduction, Random experiment and sample space, Event, Conditional Probability, Total Probability, Bayes' Theorem	Exercises of Chapter from CBSE Book	Calculating central tendency using Excel
16-31 (13)	UNIT – 8 COORDINATE GEOMETRY		
	Straight line, Circle, Parabola	Exercises of Chapter from CBSE Book	
January			
1-15 (0)	Winter Break		
16-31 (13)	UNIT – 7 FINANCIAL MATHEMATICS		
	Interest and Interest Rates, Accumulation with simple and compound interest, Simple and compound interest rates with equivalency, Effective rate of interest, Present value, net present value and future value, Annuities, Calculating value of Regular Annuity, Simple applications of regular annuities (upto 3 period)	Exercises of Chapter from CBSE Book	Calculating interest (simple and compound) using Excel
	Tax, calculation of tax, simple applications of tax calculation in Goods and service tax, Income Tax, Bills, tariff rates, fixed charge, surcharge, service charge, Calculation and interpretation of electricity bill, water supply bill and other supply bills		
February			
1-15 (12)	Revision for Final Exams		

TERMWISE SYLLABUS

UT 1 (July)	UNIT - 1 (NUMBERS, QUANTIFICATION AND NUMERICAL APPLICATIONS), UNIT - 2 (ALGEBRA-SETS, RELATIONS)
Half Yearly/Term 1(Sep.)	UNIT- 1, 2 (ALGEBRA; NUMBERS, QUANTIFICATION AND NUMERICAL APPLICATIONS)
UT 2 (November)	UNIT - 3, 4 (MATHEMATICAL REASONING; ALGEBRA- PERMUTATIONS & COMBINATIONS)
Annual (Feb-March)	COMPLETE SYLLABUS