

ACADEMIC PLANNER (APPLIED MATHEMATICS-XII, 2022 - 23)

Month(WD)	Content	Homework & Assignment	Practical/Project Work
April 1-15 (10)	UNIT - 2 ALGEBRA Matrices and Types of Matrices Equality of matrices, Transpose of a matrix, Symmetric and Skew symmetric matrix, Algebra of Matrices Determinants	Exercises of Chapter from CBSE Book	
April 16-30 (13)	UNIT - 2 ALGEBRA Inverse of a Matrix, Solving system of simultaneous equations using matrix method and Cramer's rule UNIT-1 NUMBERS, QUANTIFICATION AND NUMERICAL APPLICATIONS Modulo Arithmetic, Congruence Modulo	Exercises of Chapter from CBSE Book Exercises of Chapter from CBSE Book	Matrix multiplication and the inverse of a matrix using Spreadsheet
May 1-15 (10)	UNIT-1 NUMBERS, QUANTIFICATION AND NUMERICAL APPLICATIONS Alligation and Mixture Numerical Problems: Boats and Streams (upstream and downstream)	Exercises of Chapter from CBSE Book	Project on any one topic from the List of Projects suggested by CBSE - HHW
July 1-15 (12) 16-31 (13)	UNIT-1 NUMBERS, QUANTIFICATION AND NUMERICAL APPLICATIONS Numerical Problems: Pipes and Cisterns Races and Games, Numerical Inequalities UNIT - 3 CALCULUS Higher Order Derivatives, Application of Derivatives, Marginal Cost and Marginal Revenue using derivatives Increasing /Decreasing Functions, Maxima and Minima	Exercises of Chapter from CBSE Book Exercises of Chapter from CBSE Book	Plot the graphs of functions on excel and study the graph to find out the point of maxima/minima
August 1-15 (9)	UNIT- 3 CALCULUS Integration and its Applications Integration, Indefinite Integrals as family of curves		

16-31 (13)	UNIT- 3 CALCULUS Definite Integrals as area under the curve Application of Integration <hr/> Differential Equations and Modeling <hr/> Differential Equations, Application of Differential Equations	Exercises of Chapter from CBSE Book Exercises of Chapter from CBSE Book	
September 1-15(12) 16-30 (13)	UNIT - 8 LINEAR PROGRAMMING Introduction and related terminology, Mathematical formulation of Linear Programming Problem, Different types of Linear Programming Problems Graphical method of solution for problems in two variables Feasible and Infeasible Regions, Feasible and infeasible solutions, optimal feasible solution HALF YEARLY EXAMINATIONS	Exercises of Chapter from CBSE Book	
October 1-15 (8) 16-31 (11)	UNIT- 4 PROBABILITY DISTRIBUTIONS Probability Distribution, Mathematical Expectation Variance UNIT- 4 PROBABILITY DISTRIBUTIONS Binomial Distribution, Poisson Distribution, Normal Distribution	Exercises of Chapter from CBSE Book Exercises of Chapter from CBSE Book	
	UNIT – 6 INDEX NUMBERS AND TIME BASED DATA Time Series, Components of Time Series, Time Series analysis for univariate data Secular Trend, Methods of Measuring trend	Exercises of Chapter from CBSE Book	Collect data from newspapers on traffic, sports activities and market trends and use excel to study future trends
November 1-15 (11) 16-30 (13)	UNIT - 5 INFERENTIAL STATISTICS Population and Sample, Parameter and Statistics and Statistical Interferences t-Test (one sample t-test and two independent groups t-test) UNIT - 7 FINANCIAL MATHEMATICS	Exercises of Chapter from CBSE Book	Collect the data on weather, price, inflation, and pollution analyze the data and make meaningful

	Perpetuity, Sinking Funds, Valuation of Bonds, Calculation of EMI Calculation of Returns, Nominal Rate of Return, Compound Annual Growth Rate, Linear method of Depreciation	Exercises of Chapter from CBSE Book	Stock Market data sheet on excel
December 1-15 (12) 16-31 (14)	Pre-Board Examination		

TERMWISE SYLLABUS	
C. T 1 (May)	UNIT - 2 (ALGEBRA)
C. T 2 (July)	UNIT-1 NUMBERS, QUANTIFICATION AND NUMERICAL APPLICATIONS
Half Yearly/Term 1 (Sep.)	UNIT- 1, 2, 3,8 (NUMBERS, QUANTIFICATION AND NUMERICAL APPLICATIONS, ALGEBRA, CALCULUS, LINEAR PROGRAMMING)
C. T 3 (November)	UNIT - 4 (PROBABILITY DISTRIBUTION)
Pre-Board (December)	Complete Syllabus