SBP DAV Centenary Public School Fatehabad

Syllabus Division -2023-24

Class XI Applied Mathematics

Month	Chapter/ content	Activities/ Co-curricular Activities
April	**Unit-1** **Quantification and numerical applications** Binary Numbers, Indices, Logarithm and antilogarithms, Averages, Clock, Calendar , Mensuration	Project on Fibonacci sequence: Its' history and presence in nature
May	**Unit -2** **Algebra** Sets Relations Sequences and Series A.P., G.P., A.M., G.M., and its Applications Permutation & Combinations	Smart Purchasing during Sale Season. Comparing sets of Natural numbers, rational numbers, real numbers and others / Use of Venn diagram in solving practical problems of sets
June	Summer Break	
July	**Unit – 3** **Mathematical and Logical Reasoning** Odd man out, Syllogism, Blood Relation, Coding Decoding **Unit-4** **Calculus** Functions Limits & Continuity of a function Differentiation, Derivatives of algebraic function using chain Rule	Plot the graph of functions on excel study the nature of function at various points, drawing lines of tangents. Prepare a report card using scores of the last four exams and compare the performance.

August	Unit 5 Probability Random experiment and sample space, Event, Conditional Probability , Total Probability, Bayes' Theorem Unit 8 Straight Line	How the probability used in determining the insurance premium, weather forecasts etc. How the Coordinate Geometry used in Air Traffic Control in Space
September	Revision & Half yearly Exams	
October	Unit – 6 Descriptive Statistics Measures of Dispersion(M.D., S.D., Variance), Skewness and kurtosis , Percentile rank and quartile rank Correlation (Product Correlation, Karl Pearsons Coefficient of Correlation, Spearman's rank correlation) Unit 8 Circle Parabola	Visit the census site of India http://www.censusindia.gov.in/Census_Data_2001/Census_Data_Online/Languag e/State ment3.htm Depict the information given there in a pictorial form /Collect the data on weather, price, inflation, and pollution. Sketch different types of graphs and analyze the results
November	Unit -7 Basics of Financial Mathematics Difference between Nominal Interest Rate, Effective Rate and Real Interest Rate Simple Interest and Compound Interest PV, NPV	Create a budget of income and spending Prepare the best option plan to buy a product by comparing cost, shipping charges, tax and other hidden cost

	Anniuities Simple applications of regular annuities(upto 3 period) Tax- GST and Income Tax Calculations and Interpretation of electricity bill, water supply bill and others bills	
December	**Revision & Pre-Board Exams**	
January	**Pre- Board Exams**	
February March	**Revision & Annual Exams**	

Syllabus For Unit Test

Unit-1 NUMBERS, QUANTIFICATION AND NUMERICAL APPLICATIONS
Unit -2 Algebra

Syllabus For Half Yearly exams

Unit-1 NUMBERS, QUANTIFICATION AND NUMERICAL APPLICATIONS
Unit -2 Algebra
Unit – 3 Mathematical and Logical Reasoning
Unit-4 Calculus
Unit-5 Probability
Unit -8 Straight line