THE WISDOM GLOBAL SCHOOL
SYLLABUS BIFURCATION
GRADE - XII
SUBJECT- APPLIED MATHEMATICS
NAME OF THE BOOK - APPLIED MATHEMATICS(M L AGGARWAL)
YEAR-2023-2024
NAME OF THE TEACHER- Mr. SUSHIL CHANDRA BHATT

S. No.	BOOK NAME	MONTH	CHAPTER NO.	CHAPTER NAME	SUB.TOPIC	NO.OF DAYS REQUIRED
1	APPLIED MATHEMATICS(M L AGGARWAL)	APRIL	1	NUMBERS, QUANTIFICATION AND NUMERICAL APPLICATIONS	Introduction	2
2		APRIL			Modulo Arithmetic	2
3		APRIL			cogruence modulo	2
4		APRIL			Simple airthmetic functions	2
5		APRIL			Alligation and Mixture	2
6		APRIL			Numerical problems - Boat and Streams	2
7		APRIL			Pipes and cistern, Races and games	2
8		APRIL			Practice - Extra problems	1

9	APPLIED MATHEMATICS(M L AGGARWAL)	APRIL	2	NUMERICAL INEQUALITIES	Introduction- Numerical and reasoning inequalities	2
10		APRIL			Linear inequalities in one variable	2
11		MAY			Solution of a system of linear inequalities in one variable	2
12		MAY			Graphical solution of a system of linear inequalities in one variable	2
13		MAY			Practice - Extra problems	1
14	APPLIED MATHEMATICS(M L AGGARWAL)	MAY	3	MATRICES	Introduction	1
15		MAY			Matrices and types of matrices	2
16		MAY			Equality of matrices, Transpose of a matrix, Symmetric and Skew symmetric matrix	2
17		MAY			Algebra of matrices	2

18		MAY			Practice - Extra problems	2
19	APPLIED MATHEMATICS(M L AGGARWAL)	MAY	4	DETERMINANTS	Introduction, Determinant of a square matrix	1
20		MAY			Minors and Cofactors	1
21		MAY			Properties of Determinants	2
22		MAY			Area of triangle	1
23		MAY			Adjoint and inverse of a matrix	2
24		MAY			Solving system of simaltaneous equations using matrix method, Cramer's rule	2
25		MAY			Practice - Extra problems	2
26	APPLIED MATHEMATICS(M L AGGARWAL)	JUNE	5	DIFFERENTIATION	Introduction	1
27		JUNE			Implicit differentiation	2
28		JUNE			Logarithmic differentiation	2
SUMMER BREAK						

29		JULY			Derivatives of functions in parametric forms	2
30		JULY			Higher order derivatives	2

31		JULY			Practice- extra problems	2
32		JULY	6	APPLICATIONS OF DERIVATIVES	Introduction	2
33		JULY			Derivative as a rate measure	2
34		JULY			Tangents and Normals	2
35		JULY			Increasing and decreasing functions	1
36		JULY			Maxima and Maxima, practical problems	2
37		JULY			Marginal cost and marginal revenue using derivatives	1

					Practice- extra problems	2
38		JULY				
39	APPLIED MATHEMATICS(M L AGGARWAL)	JULY	7	INTEGRALS	Introduction	2
40		JULY			propertires of indefinite integrals	2
41		JULY			Integration by partial fractions	2
42		AUGUST			Integration by parts	2
43		AUGUST			Fundamental theorems of Integral calculus	2
44		AUGUST			Definite integrals, properties	2
45		AUGUST			Application of Integrals	1
46		AUGUST			Practice- extra problems	1

47	APPLIED MATHEMATICS(M L AGGARWAL)	AUGUST	8	DIFFERENTIAL EQUATIONS	Introduction, Order and degree of a differntial equation	2
48		AUGUST			Solution of a differential equation	2
49		AUGUST			Formation of Differential equation	2
50		AUGUST			Solving a Differential equation - by Variable separable	2
51		AUGUST			Linear Differential equation	2
52		AUGUST			Applications of Differential equations- Growth and decay model, Newton's law of cooling, Carbon dating, Durg assimilation into the blood	2
53		AUGUST			Practice- extra problems	2

54	APPLIED MATHEMATICS(M L AGGARWAL)	AUGUST	9	PROBABILITY	Introduction, Random variables	2
<td colspan="6" align="center">**MID TERM EXAMINATION**</td>						
55		SEPTEMBER			Probability distribution of random variables	2
56		SEPTEMBER			Mean and Variance of probability distribution	2
57		SEPTEMBER			Binomial experiment	3
58		SEPTEMBER			Mean and Variance of binomial distribution	3
59		SEPTEMBER			Possion distribution	2
60		SEPTEMBER			Normal distribution	2
61		SEPTEMBER			Applications of probability distribution	2
62		SEPTEMBER			Practice- extra problems	2
63	APPLIED MATHEMATICS(M L AGGARWAL)	SEPTEMBER	10	INFERENTIAL STATISTICS	Introduction	2
64		SEPTEMBER			Population ans sample	2
65		OCTOBER			Parameter and Statistics and statistical inferences	2

66		OCTOBER			Hypothesis testing	2
67		OCTOBER			t- Test (one sample t-test and two independent groups t-test)	2
68		OCTOBER			Practice- extra problems	2
69	APPLIED MATHEMATICS(M L AGGARWAL)	OCTOBER	11	TIME-BASED DATA	Introduction	2
70		OCTOBER			Time series and its components	2
71		OCTOBER			Models of time series analysis, Trend analysis	3
72		OCTOBER			Method of least squares	3
73		NOVEMBER			Practice- extra problems	3
	APPLIED MATHEMATICS(M L AGGARWAL)	NOVEMBER	12	PERPETUITY, SINKING FUNDS AND EMI	Introduction	2
		NOVEMBER			Perpetuity and sinking funds	2

		NOVEMBER			Equated monthly installment (EMI), Calculation of EMI	2
		NOVEMBER			Amortization of Loans	2
		NOVEMBER			Practice- extra problems	2
	APPLIED MATHEMATICS(M L AGGARWAL)	NOVEMBER	13	RETURNS, GROWTH AND DEPRECIATION	Introduction, Return of Investment (ROI)	2
		NOVEMBER			Normal rate of Return	2
74		NOVEMBER			Compound annual growth rate	2
75		NOVEMBER			Depreciation, Linear method of depreciation	2
	APPLIED MATHEMATICS(M L AGGARWAL)	NOVEMBER	14	LINEAR PROGRAMMING	Introduction	2
		NOVEMBER			Mathematical formulation of linear programming problems	2
		NOVEMBER			Graphical method of solution for problems in two variables	2

		NOVEMBER			ISO- Profit/ISO-Cost method of solving LPP	2
		NOVEMBER			Practice- extra problems	2

AL)

ACTIVITY/PROPS	SMART BOARD(PPT/VIDEO)	CHART
NO	NO	NO
YES	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
YES	NO	NO
NO	NO	NO

NO	NO	NO
NO	NO	NO
NO	NO	YES
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
YES	NO	NO

NO	NO	NO
NO	NO	NO
YES	NO	NO
YES	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
N0	NO	NO
NO	NO	NO
NO	NO	NO

NO	NO	NO
NO	NO	NO

NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
YES	YES	NO
NO	NO	NO

NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	YES	NO
YES	NO	NO
NO	NO	NO

NO	NO	NO
NO	PPT	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
YES	NO	NO
NO	NO	NO

YES	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO

NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
YES	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO

NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	NO
NO	NO	YES
NO	NO	NO
YES	NO	NO

NO	NO	NO
NO	NO	NO