ST. LAWRENCE HIGH SCHOOL

27, BALLYGUNGE CIRCULAR ROAD, KOLKATA - 700019

Session Plan / Syllabus Coverage for the Academic Year 2026-2027

Subject : MATHEMATICS **Term: FIRST** **Name of the Subject Co - ordinator : CHAITALI ROY**

Name of the book: 1. Understanding ISC Mathematics (XII) by M.L.Aggarwal (MLA)

No. of Working Days : 61 **No. of Periods Available: 67** **Class : XII** **Section : A,B**

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	CLASS WORK	TEACHING AIDS
APRIL	17	Section - A 1)Ch-1-Relations and Functions, Pg-1 2) Ch-2-Inverse Trigonometric Functions, Pg-92 3) Ch-3-Matrices, Pg-59	1)Types of Relations, Domain & Range of a function, Types of functions, Composite functions and Invertible functions 2)Definition, Domain, Range, Principal Value Branch, 3) Types of Matrices and operations, Order, Equality, Transpose, Symmetric and Skew Symmetric matrix.	1)Selected question from Ex - 1.1 to 1.5 – Pg - 18 to 70 2) Selected questions from Ex-2.1,2.2 – Pg- 102 to 147 3) Selected questions from Ex-3.1 to 3.5-Pg-165 to 218	Cardboard, strings of different colours, pins, adhesive.
MAY	12	1)Ch-2-Inverse Trigonometric Functions, Pg-92, Contd. 2) Ch-4-Determinants, Pg-230	1)Elementary properties and application of formulae. 2)Order, Minors, Co factors, Expansion, Properties of determinants. Adjoint and Inverse of matrix, Conditions for consistency of equations in two and three variables. Martin's rule. Application of determinant.	1) Ex 3.5 contd.. 2) Selected questions from Ex-4.1 to 4.4-Pg-238 to 304	Cardboard, strings of different colours, pins, adhesive
JUNE	14	1) Ch-5-Continuity and Differentiability, Pg-336, 2) Ch-7-Applications of Derivatives,Pg-519 3) Ch-4-Determinants contd.. **Unit Test 1 on 15.06.2026)** **(Syllabus for Unit Test 1: Relations & Matrices)**	1)Continuity, Differentiability by First principle. First order derivatives and Second order derivatives. 2)Tangent and Normal, Rate Measure, Increasing and Decreasing function, Maxima and Minima 3)Determinants contd..	1)Selected questions from Ex-5.1 to 5.10-Pg-351 to 442 2)Selected questions from Ex-7.1 to Ex-7.8 - Pg-530 to 632 3) Selected questions from Ex-4.5-Pg-319 to 321	Cardboard, strings of different colours, pins, adhesive.
JULY	24	1)Ch-8-Integral, Pg- 651 Section – B 2)Ch-1-Vector, Pg- 1161 3) Ch-5-Continuity and Differentiability, Pg-336	1)Integration as the inverse of differentiation, Antiderivatives of polynomials and functions $\sin^2x$, $\cos^2x$, $\sin^3x$, $\cos^3x$, $\sin^4x$, $\cos^4x$, $1/x$, e^x etc Integration by substitution, Two special forms, Four standard integrals, Seven more standard integrals, Integrals of the types: $\int \frac{px+q}{ax^2+bx+c}dx$, $\int \frac{px+q}{\sqrt{ax^2+bx+c}}dx$, $\int \frac{dx}{a\cos x+b\sin x+c}$, $\int \frac{p\cos x+q\sin x}{a\cos x+b\sin x}dx$, $\int \frac{dx}{a\cos^2 x+b\sin^2 x+c}$ etc Integration by partial fractions 2) Types of Vectors, operations, Dot product, Cross product, Scalar Triple product	1)Selected questions from Ex-8.1 to Ex-8.8 - Pg-654 to 719. 2)Selected questions form Ex-1.1 to Ex-1.4-Pg-1186 to 1254(Section – B) 3) Selected question from Ex- 5.11 to 5.13- Pg-461 to 480	White chart paper, coloured pens, pencil, eraser and thin wires or wool

Teachers are requested to prepare a LESSON PLAN for each Topic monthwise.
Kindly mention the chapters included for Terminal Examinations

Submitted on : 20.04.2026

Signature of the Co Teachers : 1. CRoy 20.4.26. 2. Indranil Ghosh 20.4.26

Academic Co-ordinator: Soumak chatterjee

PRINCIPAL.

VICE PRINCIPAL

ST. LAWRENCE HIGH SCHOOL

27, BALLYGUNGE CIRCULAR ROAD, KOLKATA- 700019

Session Plan / Syllabus Coverage for the Academic Year 2026-2027

Subject : MATHEMATICS **Term: FIRST & REHEARSAL TEST** **Name of the Subject Co - ordinator : CHAITALI ROY**

Name of the books: 1. Understanding ISC Mathematics (XII) by M.L.Aggarwal (MLA)

No. of Working Days : 61 , 36 + 49 **No. of Periods Available: 36 + 49** **Class : XII** **Section : A,B**

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	CLASS WORK	TEACHING AIDS
AUGUST	21	**(Project 1 submission on 12.8.2026) OR Section – C** 1) Ch-1- Application of Calculus in Commerce and Economics, Pg-1443 2)Ch-2-Linear Regression, Pg-1476	1)Cost function, Av. Cost, MC, MAC,MR and its interpretation, Demand function, Revenue and Profit functions and breakeven point and problem sums. 2)Properties of lines of regression, Scatter diagrams, Lines of best fit, Regression coeffecients. Identification of regression equations, estimation of the value of one variable using the value of other variable form appropriate line of regression	1) Selected questions from Ex-1.1 to Ex-1.4-Pg -1446 to 1471 (Section - B) 2) Selected questions from Ex-2-Pg-1493 to 1496 (Section - C)	Cardboard, white paper, geometry box, paper arrow heads, video
SEPTEMBER	15+8	1) Ch-8- Integrals contd.. **(First Term Exam begins from 07.09.2026), Syllabus for First Term – (Section – A - Ch-1,2,3,4,5,7,8(Ex-8.1 to Ex-8.10), (Section - B - Ch-1), (Section- C- Ch-1,2) Second Term begins from 21.09.2026**	Revision 1) Integral by parts and other types, Fundamental theorem of integral calculus, Evaluation of definite integrals by substitution, Properties of definite integrals.	1) Selected questions from Ex-8.9 to Ex-8.18-Pg-725 to 860	Geometrical instruments, thin wires, sketch pens, chart paper, and graph papers
OCTOBER	14	1) Ch-9-Differential Equations, Pg-882 2) Ch-10- Probability-Pg-990 **Section – B** 3) Ch-2-Three Dimensional Geometry - Pg -1271 **(Project 2 submission on 28.10.2026)**	1) Order and degree, Solution and Formation, homogeneous and linear differential equation 2) Conditional probability, multiplication theorem, Independent events, Laws of total probability, Baye's theorem, Probability distribution and its mean. 3) Cartesian and vector equations and their intersections, Co planar and skew lines, Shortest distance, Different forms, Angle between two planes, line and a plane	1) Selected questions from Ex-9.1 to Ex-9.8-Pg-885 to 979 2) Selected questions from Ex-10.1 to Ex-10.9-Pg-1000 to 1140 3) Selected questions from Ex-2.1 to Ex-2.1 to Ex-2.8-Pg-1283 to 1388 (Section-B)	Cardboard, white paper, geometry box, paper arrow heads, video
NOVEMBER	20	**Section – B** 1) Ch-3-Application of Integrals-Pg-1405 **OR Section – C** 2) Ch-3-Linear Programming – Pg-1501	1)Area enclosed by simple curves and co ordinate axes and also between two curves 2)Related terminology: objective function, constraints, optimization, advantages of L.P.P, Mathematical formulation of L.P.P, Graphical method of solution for problems in two variables, feasible and infeasible regions, optimum feasible solutions	1) Selected questions from Ex - 3, Pg- 1435 to 1438 Section – B) 2) Selected questions from Ex- 3.1 to Ex 3.2 – Pg- 1506 to 1529	Two pieces of plywood, a thin wooden rod with nuts and bolts fixed on both sides, three pieces of wires, pen or pencil, geometry box and a pair of dice
DECEMBER	07	**Rehearsal Examination begins from 01.12.2026 Syllabus for Rehearsal Examination-** (Section- A- Ch-1,2,3,4,5,7,8, 9,10), (Section-B-Ch-1,2,3),(Section-C Ch-1,2,3)	Examination continues till 14.12.2026	--------	---------

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Kindly mention the chapters included for Terminal Examinations

Submitted on : 20.04.2026

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