



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 Textbook: Understanding ISC Mathematics (XI) by M.L.Agarwal

No. of Working Days : 56

No. of Periods Available: 63

Class : XI

Section : A

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	CLASS WORK	TEACHING AIDS
APRIL	13	1)Sets(Pg 1-43) 3)Trigonometry(Pg 93-194) 10)Straight lines(Pg 519-605)	Set Theory. Relation between radian and degrees. Allied Angles. Locus, shifting of origin. Slope, two-point form, intercept form of straight line ,etc.	Solutions of problems from the exercises of Set Theory(Ex.1.1 - 1.3),Trigonometry(Ex.3.1-3.3), Straight lines(Ex.10.1 – 10.3).	Using Venn diagram, verify the distributive law for three given non-empty sets A, B and C. Establish the relationship between the measure of an angle in degrees and in radians.
MAY	12	1)Sets(continued)(Pg 1-43) 2) Relations and Functions(Pg.45-92) 3)Trigonometry(continued)(Pg 93-194) 10)Straight lines(continued)(Pg 519-605) 9)Sequences & Series(Pg 431-511)	Cartesian product. Domain & Range of Relation, Formulae of Compound Angles, Sums & Products. Angle between two straight lines, distance of a point from a straight line & equation of angle bisectors of straight line. General term, Sum of n terms of an A.P. Inserting A.M.	Solutions of problems from the exercises of Sets(Ex.1.4 - 1.5) Compound Angles, Sums and Products(Ex.3.4– 3.6),Relations(Ex.2.1 – 2.3).Straight lines(Ex.10.4 – 10.11).A.P(Ex.9.1 – 9.3).	Obtain the equation of the straight line in the normal form, for each of the following, on the same graph: (i) $\alpha < 90^\circ$ (ii) $90^\circ < \alpha < 180^\circ$.Distinguish between a relation and a function graphically. Drawing the graph of $\cos x$, $\sin x$.
JUNE	14	2)Relations & Functions(Pg.45-92) 3)Trigonometry(Pg.93-194). 5)Quadratic Equations(Pg253-298) 9)Sequences & Series(Pg 431-511) Unit Test 1 on 15.06.2026.Syllabus-Ch-1(Ex-1.1-1.3),Ch-3(Ex-3.1-3.3)	Graphs of functions. Domain & Co-domain(Range) of Functions. Formulae of Multiple angles. Relation between roots and coefficients of quadratic equations. General term, Sum of n terms of a G.P. Inserting G.M. Summation of series.	Solutions of problems from the exercises of Quadratic equations(Ex.5.1–5.5) Functions(Ex.2.4 – 2.6),Multiple Angles(Ex 3.7). G.P(Ex.9.4-9.7).	From the graph of quadratic equation $f(x)=ax^2+bx+c$, find maximum/minimum value of the function, sign of the expression. Obtain a formula for the sum of the squares, cubes of 'n' natural nos.
JULY	24	4)Complex Numbers(Pg.195-252) 6) Linear and Quadratic Inequalities (Pg299-325) 7)Permutations & Combinations(Pg.400-469). (Project 1 Submission on 22.07.2026)	Algebra & Properties of Complex numbers, etc. Inequalities Method of Intervals. Solution of linear in equations in one variables. Formulae on ${}^n C_r$, ${}^n P_r$, $n!$. Circular Permutations ,etc.	Solutions of problems from the exercises of Complex Numbers(Ex.4.1-4.3),Inequalities(Ex.6.3-6.4), Permutations(Ex.7.1-7.5).	Using Argand plane, interpret geometrically, the meaning of i and its integral powers.

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

Signature of the Co Teachers : 1. Chaitali Roy 2. Indranil Ghosh
20.04.26. 20.4.26

Submitted on : 20.04.2026

Academic Co-ordinator: Soumali Chatterji

PRINCIPAL

[Signature]

VICE PRINCIPAL

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27, BALLYGUNGE CIRCULAR ROAD, KOLKATA - 700019

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



Subject : MATHEMATICS

Term: FIRST & SECOND

Name of the Subject Co-ordinator : CHAITALI ROY

Name of the Textbook: Understanding ISC Mathematics (XI) by M.L. Aggarwal

No. of Working Days : 56 , 36 + 42

No. of Periods Available: 27 + 39

Class : XI

Section : A

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	CLASS WORK	TEACHING AIDS
AUGUST	24	4) Complex Numbers.(continued)(Pg.195-252). 7) Permutations & Combinations(continued)(Pg.400-469).	Square root of a complex number. Cube roots of unity. Arrangements and selections and their applications, etc. Mixed problems on permutation and combinations.	Solution of problems from the exercises of Complex Numbers(Ex.4.4-4.5), Combinations(Ex.7.6-7.8).	Application of Pigeon Hole Principle using deck of cards.
SEPTEMBER	3+7	11) Circles.(Pg.606-635). <u>(1st Term exam begins from 07.09.2026. Syllabus : Ch-1,2,3,4,5,6,7,9,10. 2nd Term begins from 21.09.2026.</u>	Centre and radius of circle. Various standard equations of circle, diameter form, parametric form, etc.	Circles (Ex.11.1-11.5).	Let S and S' be two(non-concentric) circles with centres A , B and radii r , r' and d be the distance between their centres. Finding relation between r , r' and d with respect to relative position of two circle.
OCTOBER	15	8) Binomial Theorem.(Pg. 398-430). 14) Limits & Derivatives.(Pg. 703-773). <u>(Project – 2 : Submission on 28.10.2026).</u>	General term & middle term of a binomial expansion. Some standard limits, etc.	Solutions of problems from the exercises of Binomial Theorem (Ex.8.1-8.2), Limits (Ex 14.1 -14.3).	Construct a Pascal's triangle to write a binomial expansion for a given positive integral exponent.
NOVEMBER	17	14) Limits & Derivatives, (continued)(Pg.703-773). 13) Introduction to 3D Geometry(Pg. 977-998). <u>Unit Test 2 starts from 16.11.2026. Syllabus:Ch 8,Ch 11</u>	Differentiation using first Principles. Fundamental theorems on differentiation. Derivatives of polynomial and trigonometric functions. Rectangular Cartesian Co-ordinate system in 3D, Distance between two points, Section Formula.	Solutions of problems from the exercises of Derivatives(Fx 14 4-14 5), 3D Geometry(Fx 13 1-13 3)	Geometrical significance of X coordinate, Y coordinate, and Z coordinate in space Finding the distance of the point in space from x-axis/y-axis/z-axis. Explain the above using a three-dimensional model/ power point presentation.

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Signature of the Co Teachers : 1. Chaitali Roy 20.04.26 2. Ankanil Ghosh 20.4.26

Submitted on : 20.04.2026

Academic Co-ordinator: Soumak Chatterjee

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



Subject : MATHEMATICS

Term: SECOND

Name of the Subject Co-ordinator : CHAITALI ROY

Name of the Textbook: Understanding ISC Mathematics (XI) by M.L.Aggarwal

No. of Working Days : 42 , 58

No. of Periods Available: 48

Class : XI

Section : A

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	CLASS WORK	TEACHING AIDS
DECEMBER	17	12) Conic Sections-Parabola, Ellipse & Hyperbola.(Pg.901-976).	SP/PL= e. Parabola. Ellipse. Hyperbola. Definition of Foci, Directrix, Latus Rectum, etc. Various forms and properties of Parabola, Ellipse and Hyperbola.	Solutions of problems from the exercises of Conic sections(Ex.12.1-12.4).	Construct different types of conics by PowerPoint Presentation, or by making a model, using the concept of double cone and a plane. Use focal property to construct ellipse, hyperbola.
JANUARY	22	15) Statistics.(Pg 774-802). 16) Probability.(Pg.803-860).	Means deviation, Standard deviation, Variance. Combined mean and standard deviation. Events: sure events, impossible events, mutually exclusive and exhaustive events. Definition of probability of an event, etc.	Solutions of problems from the exercises of Probability (Ex.16.1-16.4) and Statistics(Ex.15.1-15.3).Revision from textbook and reference books.	Identify the variability and consistency of two Sets of statistical data using the concept of Coefficient of variation.. Also construct a sample space by taking a suitable example. Construct the tree structure of the outcomes of a random experiment, when elementary events are not equally likely.
FEBRUARY	09	<u>2nd Term exam begins from 15.02.2027.</u> <u>Syllabus for 2nd Term Exam: Ch 1,Ch 2,Ch 3,Ch 4,Ch 5,Ch 6,Ch 7,Ch 8,Ch 9,Ch 10, Ch 11,Ch 12,Ch 13,Ch 14,Ch 15,Ch 16.</u>	Revision of full syllabus from textbook and reference books.	Revision of full syllabus from textbook and reference books.	-----
MARCH	00	Correction work continues.	Correction work continues	-----	-----

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Kindly mention the chapters included for Terminal Examinations

Signature of the Co Teachers : 1. Chaitali Roy 2. Indranil Ghosh

20.04.26.

20.4.26

Submitted on : 20.04.2026

Academic Co-ordinator: Soumak Chatterjee

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