



ST. LAWRENCE HIGH SCHOOL

27, BALLYGUNGE CIRCULAR ROAD, KOLKATA - 700019

Session Plan / Syllabus Coverage for the Academic Year 2025-2026



Subject : MATHEMATICS

Term: FIRST

Name of the Subject Co-ordinator : INDRANIL GHOSH

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

No. of Working Days : 100

No. of Periods Available: 63

Class : XI

Section : A,B

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	CLASS WORK	TEACHING AIDS
APRIL	16	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	10	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	12	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 16th June.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.Summatation 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 no.s.
JULY	25	4)Complex Numbers(Pg.195-252) 6) Linear and Quadratic Inequalities(Pg299-325) 7)Permutations & Combinations(Pg.400-469). (Project 1 Submission on 4th July, 2025)	Algebra & Properties of Complex numbers,etc. Inequalities-Method of Intervals.Solution of linear inequations in one variables. Formulae on nC_r , nP_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 Ray* 2. *Indranil Ghosh*

Submitted on : *13.5.25*
21.4.25
Academic Co-ordinator: *Soumuk Chatterjee*

PRINCIPAL.

VICE PRINCIPAL

[Signature]

[Signature]



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27, BALLYGUNGE CIRCULAR ROAD, KOLKATA - 700019

Session Plan / Syllabus Coverage for the Academic Year 2025-2026



Subject : MATHEMATICS

Term: FIRST & SECOND

Name of the Subject Co-ordinator : INDRANIL GHOSH

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

No. of Working Days : 100, 92

No. of Periods Available: 69

Class : XI

Section : A,B

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	CLASS WORK	TEACHING AIDS
AUGUST	23	4) Complex Numbers.(continued)(Pg.195-252). 7) Permutations & Combinations(continued)(Pg.400-469).	Square root of a complex numbe.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	10	11) Circles.(Pg.606-635). <u>(1st Term exam begins from 15th September. Syllabus : Ch-1,2,3,4,5,6,7,9,10.</u>	Centre and radius of circle.Variou 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	<u>2nd Term begins from 7th October.</u> 8) Binomial Theorem.(Pg. 398-430). 14) Limits & Derivatives.(Pg. 703-773). <u>(Project 1: Submission on 11th October).</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	21	14) Limits & Derivatives.(continued)(Pg.703-773). 13) Introduction to 3D Geometry(Pg. 977-998). <u>Unit Test 2 starts from 17th November.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(Ex.14.4-14.5), 3D Geometry(Ex.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 2. Indranil Ghosh

Submitted on : 13.5.25
21.4.25

Academic Co-ordinator: Soumak Chatterjee

PRINCIPAL

VICE PRINCIPAL

B. K. S.



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27, BALLYGUNGE CIRCULAR ROAD, KOLKATA - 700019
Session Plan / Syllabus Coverage for the Academic Year 2025-2026



Subject : MATHEMATICS

Term: SECOND

Name of the Subject Co-ordinator : INDRANIL GHOSH

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

No. of Working Days : 92

No. of Periods Available: 47

Class : XI

Section : A,B

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	CLASS WORK	TEACHING AIDS
DECEMBER	18	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	17	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	12	<u>2nd Term exam begins from 16th Feb, 2026.</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.		
MARCH	00	Correction work continues.			

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Signature of the Co Teachers : 1.

Chaitali Roy, Indranil Ghosh

Submitted on : 13.5.25

Academic Co-ordinator: 21.4.25

Soumak Chatterjee

PRINCIPAL.

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R. H. S.