ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

FOR GOD AND COUNTRY

Syllabus planning for the academic year 2021 - 2022 | TERM: First term | CLASS: 11 | TEACHER`S NAME: SUKUMAR MANDAL

No. of working days: 85 | Subject: Mathematics | SECTION: A1, A2, B, C, D

MONTH	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
JUNE 2021 (1st term begins 14th June)	Laws of Indices , Logarithm, Trigonometric Ratios of Associated angles, Co-ordinate basics , Compound angles, Sums & Products.	Laws of Indices, Properties of Logarithm , Values of the angles, Theorems on compound angles , Transformations of sums or differences into products and vice versa.	Selected sums from the exercises of Laws of Indices , Logarithm, Trigonometric Ratios of Associated angles, Co-ordinate basics , Compound angles, Sums & Products.	Selected sums from the examples & exercises of Laws of Indices , Logarithm, Trigonometric Ratios of Associated angles, Co-ordinate basics , Compound angles, Sums & Products.
JULY 2021	Trigonometric ratios of Multiple angles, Submultiple angles. Set theory , Relation & Mapping. Limit , Differentiation.	Theorems & formulas on Multiple and submultiple angles. Laws on sets, Relations, different types of functions and domain & co-domain(Range) of Functions. Theorem and Formulas on Limit & Differentiation and their applications.	Selected sums from the exercises of Trigonometric ratios of Multiple angles, Submultiple angles. Set theory , Relation & Mapping. Limit , Differentiation.	Selected sums from the examples & exercises of Trigonometric ratios of Multiple angles, Submultiple angles. Set theory , Relation & Mapping. Limit , Differentiation.
AUGUST 2021	Mathematical Induction, Complex numbers, Quadratic equations, Linear equations, Sequence & Series.	Application of principle of mathematical induction. Algebra & Properties of complex nos. Theorems, properties & formations of quadratic equations. Linear equations in one & two variables and their properties & graphical solution sets , Sequence, AP, GP .	Selected sums from the exercises of Mathematical Induction, Complex numbers, Quadratic equations, Linear equations, Sequence & Series .	Selected sums from the examples & exercises of Mathematical Induction, Complex numbers, Quadratic equations, Linear equations, Sequence & Series
SEPTEMBER 2021 (1st term ends on 15th Sept.)	Co-ordinate geometry- Straight line. **First Term online Exam begins on 16th September , 2021.** (Syllabus : UNIT 1 full , UNIT 2 (Chapter 3 to 7), UNIT 3 (Chapter 3 to 6 and Chapter 9), UNIT 4 (Chapter 2 only), UNIT 5 (Chapter 2 & 3))	Slope of straight line , Different forms of straight line , Angle between two straight lines , Condition of parallelism and perpendicularity of two given straight lines , Perpendicular distance of a given point from a given straight straight line.	Selected sums from the exercises of Slope of straight line , Different forms of straight line , Angle between two straight lines , Condition of parallelism and perpendicularity of two given straight lines , Perpendicular distance of a given point from a given straight straight line.	Selected sums from the examples & exercises of Slope of straight line , Different forms of straight line , Angle between two straight lines , Condition of parallelism and perpendicularity of two given straight lines , Perpendicular distance of a given point from a given straight straight line.

Teachers are requested to prepare a LESSON PLAN for each Topic to be taught. The Lesson plans are to be submitted along with the monthly planner.

Submitted Date: 15/03/2021

Signature of Teacher: Sukumar Mandal 15/03/2021

Academic Co-ordinator: Jayashree Sherpa 15/3/21

PRINCIPAL:

VICE PRINCIPAL: 15/3/2021

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Syllabus planning for the academic year 2021 - 2022 | TERM: SECOND TERM | CLASS: 11 | TEACHER`S NAME: SUKUMAR MANDAL

No. of working days: 52 | Subject: Mathematics | SECTION: A1, A2, B, C, D

MONTH	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
OCTOBER 2021 (2nd Term begins on 1st oct.)	General solutions of trigonometric equations, Properties of triangles. **Project 1: Mathematician and History in Mathematics. (Last date of submission 28th October, 2021)**	Find general solutions of various trigonometric equations. Properties of triangles, sine & cosine rules.	Selected sums from the exercises of general solutions of various trigonometric equations. Properties of triangles, sine & cosine rules.	Selected sums from the examples & exercises of general solutions of various trigonometric equations. Properties of triangles, sine & cosine rules.
NOVEMBER 2021	Permutations & Combinations , Binomial Theorem. Co-ordinate geometry – Circle , Parabola.	Arrangements and selections, formulas on ${}^{n}C_{r}$, ${}^{n}P_{r}$, $n!$ and their applications. General term, Middle term, binomial coefficients. General equation of second degree , various forms & formations of circle , parametric form, Eccentricity , SP/PM=e , Focus, Locus, Directrix, Various forms & Properties of Parabola.	Selected sums from the exercises of Permutations & Combinations , Binomial Theorem , Circle , Parabola.	Selected sums from the examples & exercises of Permutations & Combinations , Binomial Theorem , Circle , Parabola.
DECEMBER 2021	Co-ordinate geometry –Ellipse, Hyperbola and 3D geometry. Statistics & Probability. **Project 2: Statistics. (Last date of submission 11th January , 2022)**	Various forms & Properties of Ellipse, Hyperbola. Rectangular Cartesian Co-ordinate system in 3D, Distance between two points, section formulae. Bar graph , pie graph , Line graph , Histogram, Frequency polygon, Ogive.	Selected sums from the exercises of Various forms & Properties of Ellipse, Hyperbola , Rectangular Cartesian Co-ordinate system in 3D, Distance between two points, section formulae, Bar graph , pie graph , Line graph , Histogram, Frequency polygon, Ogive.	Selected sums from the examples & exercises of Various forms & Properties of Ellipse, Hyperbola, Rectangular Cartesian Co-ordinate system in 3D, Distance between two points, section formulae, Bar graph , pie graph , Line graph , Histogram, Frequency polygon, Ogive.
JANUARY 2022	Statistics & Probability , Mathematical Reasoning. **The Entire syllabus is completed.** *Revision of entire syllabus.*	Mathematical statements, their types & their negation. Measure of central Tendency, Measure of dispersion (Range, Mean deviation, Standard deviation, Variance). Events, Theorems, Axioms & Results on Probability.	Selected sums from the exercises of Mathematical statements, their types & their negation , Measure of dispersion , Probability.	Selected sums from the examples & exercises of Mathematical statements, their types & their negation , Measure of dispersion , Probability.

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Submitted Date: 15/03/2021

Signature of Teacher: Sukumar Mandal 15/03/2021

PRINCIPAL:

Academic Co-ordinator: Jayashree Sherpa 15/3/21

VICE PRINCIPAL: 15/3/2021

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Syllabus planning for the academic year 2021-2022 TERM: Second term CLASS: 11 TEACHER`S NAME: SUKUMAR MANDAL

No. of working days: 18 Subject: Mathematics SECTION: A1, A2, B, C, D

MONTH	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
FEBRUARY (2nd Terms ends on 14th Feb.) 2022	Revision of entire syllabus continues... **Second Term online Exam begins on 17th February , 2022.** (Syllabus : THE ENTIRE SYLLABUS)			

Teachers are requested to prepare a LESSON PLAN for each Topic to be taught. The Lesson plans are to be submitted along with the monthly planner.

Submitted Date: 15/03/2021

Signature of Teacher: Sukumar Mandal 15/03/2021

Academic Co-ordinator: Jayashree Sharpa 15/3/21

PRINCIPAL

VICE PRINCIPAL 15/3/2021