ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

Syllabus Planner for the year 2020 - 2021

Subject: PHYSICS

TERM: FIRST TERM

TEACHER`S NAME: SOUMITRA MAITY

No. of working days:- 03   No. of periods available: 2(ESTIMATED)   CLASS: XI.   SECTION:. A1 & A2

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
JANUARY					
FEBRUARY					
MARCH					
APRIL	02	UNIT I: Physical world and measurement	Need for measurement, systems of units, accuracy, precision, dimension	Short questions MCQs from different examination papers, numericals	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.

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.

Signature of the teacher: Soumitra Maity

Date of Submission: 27.01.20

PRINCIPAL

ACADEMIC COORDINATOR: J. Sherpa 28/1/2020

VICE PRINCIPAL

ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

Syllabus Planner for the year 2020- 2021

Subject: PHYSICS

TERM:. FIRST AND SECOND

TEACHER`S NAME: SOUMITRA MAITY

No. of working days:- 70 No. of periods available: 40 CLASS: XI SECTION: A1 & A2

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
MAY	06	**UNIT II**: Kinematics	Elementary concepts of differentiation and integration Frame of reference, types of motion, Scalar and vector, projectile motion, uniform circular motion	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.
JUNE	10	**UNIT III**: Laws of motion	Concept of force, inertia, impulse, friction Newton's laws of motion, dynamics of uniform circular motion	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.
JULY	17	**UNIT IV**: Work, energy, power	Concepts of work, power and energy, work-energy theorem, Conservation of mechanical energy, Elastic and inelastic collision	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.
		UNIT V: Motion of system of particles and rigid body	Centre of mass, moment of a force, torque, angular momentum, conservation of angular momentum, equilibrium, moment of inertia, parallel and perpendicular axes theorems	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.
		UNIT VI: Gravitation	Keplar's laws of planetary motion, variations of acceleration due to gravity, gravitational potential energy, escape velocity, geo-stationary satellites	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.
AUGUST	07	**1st term exam begins on 3rd August. Syllabus for 1st Term exam : UNIT I**: Physical world and measurement, **UNIT II**: Kinematics, **UNIT III**: Laws of motion, **UNIT IV**: Work, energy, power, **UNIT V**: Motion of system of particles and rigid body and **UNIT VI**: Gravitation			
		UNIT VII: Properties of Bulk matter	Hooke's law, Young's modulus, Bulk modulus, modulus of rigidity, Poisson's ratio Pascal's law, viscosity, Stoke's law, terminal velocity, Reynold's number, stremline and turbulent flow, critical velocity, Bernoulli's theorem, Surface tension	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.

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Signature of the teacher: Soumitra Maity

ACADEMIC COORDINATOR: J. Sherpa 28/1/2020

Date of Submission: 27. 01. 20

PRINCIPAL

VICE PRINCIPAL

28/2/2020

ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

Syllabus Planner for the year 2020- 2021

Subject: PHYSICS | TERM: PRE-ANNUAL | TEACHER'S NAME: SOUMITRA MAITY

No. of working days:- 76 | No. of periods available: 44 | CLASS: XI | SECTION: A1 & A2

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
SEPTEMBER	16	**UNIT VII**: Properties of Bulk matter (contd.)	Heat, temperature, thermal expansion of solids, liquids and gases, ideal gas laws, isothermal and adiabatic processes, anamolous expansion, specific heat capacity, Cp, Cv, calorimetry, change of state, specific latent heat capacity, heat thransfer, Kirchoff's law, green house effect, thermal conductivity, Newton's law of cooling, Wein's displacement law, Stefan's law	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.
OCTOBER	10	**UNIT VIII**: Thermodynamics	Laws of thermodynamics, heat work and internal energy, heat engines and refrigerators	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.
		UNIT IX: Behaviour of perfect gas and kinetic theory	Equation of state of a perfect gas, kinetic theory of gases, kinetic energy and temperature, degrees of freedom, law of equilibrium of energy, concept of mean free path, Avogadro's number	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.
NOVEMBER	13	**UNIT X**: Oscillations and waves	Periodic motion, simple harmonic motion – equation, phase, energy in SHM Wave motion, longitudinal and transverse wave, principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics.	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.
DECEMBER	05 The entire syllabus of class xi (Physics) will be completed by 12th December, 2020	**UNIT X**: Oscillations and waves continued	Beats, Doppler effect	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed and different types of numericals will be solved.

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Signature of the teacher: Soumitra Maity

Date of Submission: 27.01.20

PRINCIPAL

ACADEMIC COORDINATOR: J. Sherpa 28/1/2020

VICE PRINCIPAL 25/2/2020

ST. LAWRENCE HIGH SCHOOL

27, BALLYGUNGE CIRCULAR ROAD, KOLKATA- 700019

Syllabus planning for the academic year 2020- 2021

Subject: PHYSICS

TERM:PRE- ANNUAL

TEACHER`S NAME: SOUMITRA MAITY

No. of working days:-15

No. of periods available: 05

CLASS: XI

SECTION: A1 & A2

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
JANUARY	03	Revision: Kinematics, Properties of Bulk matter and Thermodynamics.	Uniformly accelerated motion, Vectors, Elasticity, viscosity, surface tension, kinetic theory of gases and thermodynamics.	Selected home work will be given from the revision lessons.	Discussions, derivations, explanations Numericals Questions from W.B. council papers and test papers
FEBRUARY					
MARCH					
APRIL					

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Signature of the teacher: Soumitra Maity

Date of Submission: 27.01.20

PRINCIPAL

ACADEMIC COORDINATOR:

VICE PRINCIPAL