



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Syllabus Planner for the year 2020

TERM: FIRST TERM

TEACHER'S NAME: NILANJANA BHADRA AND SOUMITRA MAITY

No. of working days :- 85

No. of periods available : 24

Subject: PHYSICS

CLASS: X

SECTION: A,B,C & D

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
JANUARY	09	Behaviour of gases	Boyle's law, Charles law, Avogadro's law, Avogadro's number, Ideal gas, Ideal gas equation, Gay-Lussac'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.
FEBRUARY	05 Topic for Physics project will be declared.	Behaviour of gases continued	Kinetic theory of gases. Behaviour of gas at molecular level.	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.
		Thermal Phenomena	Thermal expansion – linear, superficial, volume	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.
		Physics project topic : Estimation of domestic electrical energy consumption.			
MARCH	07	Thermal Phenomena continued	Thermal conductivity, Thermal resistivity	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.
		Last date of submission of physics project is 11th March (11.03.2020)			
APRIL	03 1 st term exam begins on 15 th April	Revision of Behaviour of gases and Thermal Phenomena	Combined form of Boyle's and Charle's law and numerical based on that. Thermal expansion coefficients and their inter- relationship.	Selected home work will be given from the revision lessons.	Previous year questions will be discussed.
		Syllabus for the 1st Term : Behaviour of gases and Thermal Phenomena			

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 Teachers : *Nitanjana Bhadra* , *Soumitra Maity*

Submitted on : 27.01.20

PRINCIPAL

ACADEMIC COORDINATOR *[Signature]*

VICE PRINCIPAL *[Signature]*



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Syllabus Planner for the year 2020

TERM: PRE TEST

TEACHER'S NAME: NILANJANA BHADRA AND SOUMITRA MAITY

No. of working days :- 63

No. of periods available : 24

Subject: PHYSICS

CLASS: X

SECTION: A,B,C & D

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
MAY	06	Light	Reflection at spherical mirror – convex and concave. Refraction of light – laws, Laws of refraction Refractive index Deviation – glass slab and prism	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	07	Light Continued	Lenses – convex and concave, relative terms Human eye – structure and defects Dispersion, Light wave, Scattering	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
		Current electricity	Coulomb's law. Potential difference, emf Ohm's law and Resistance. Resistivity, conductivity & combination of Resistances.	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	11	Current electricity Continued	Heating effect of current. Power, power ratings. Domestic circuit. Electromagnetism, electromagnetic induction. AC generator and motors.	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
		<u>Revision</u> : Light and Current electricity	Image formation in mirrors and lens. Equivalent resistance and electromagnetic induction.	Selected home work will be given from the revision lessons.	Previous year questions will be discussed.
AUGUST	04 Pre Test begins on 3 rd August	Syllabus for the Pre- Test : Behaviour of gases, Thermal Phenomena, Light and Current Electricity			
		Atomic Nucleus	Concept of mass defect and nuclear binding energy. Radioactivity and its origin.	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 Teachers : *N. Tanjana Bhadra* , *Soumitra Maity*

Submitted on : 27.01.20

PRINCIPAL

ACADEMIC COORDINATOR

VICE PRINCIPAL



FOR GOD AND COUNTRY

Syllabus Planner for the year 2020

No. of working days :- 58

No. of periods available : 23

ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

TERM: SELECTION TEST

Subject: PHYSICS

CLASS: X

TEACHER'S NAME: NILANJANA BHADRA AND SOUMITRA MAITY

SECTION: A,B,C & D



MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASS WORK
SEPTEMBER	12	Atomic Nucleus Continued	Nature of α , β and γ rays. Nuclear reaction. Fission and Fusion.	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
		Concerns about our environment	Structure of the atmosphere, The ozone layer, Greenhouse effect. Rational use of energy.	Selected questions and numericals from the subtopics covered.	Concepts related to all the subtopics will be discussed.
		<u>Revision:</u> Behaviour of gases, Light and Current electricity	Boyle's and Charle's law and the combined form. Image formation by lens. Combination of resistances and electric power.	Selected home work will be given from the revision lessons.	Previous year questions will be discussed.
OCTOBER	07	<u>Revision:</u> Current electricity, Thermal phenomena and Atomic Nucleus	Faraday's law and Lenz's law. Expansion of solid liquid and gas. Nuclear reaction.	Selected home work will be given from the revision lessons.	Previous year questions will be discussed.
NOVEMBER	Test exam begins on 3 rd November.	<u>Syllabus for the Test</u> : Behaviour of gases, Thermal Phenomena, Light, Current Electricity, Atomic Nucleus and Concerns about our environment			
DECEMBER					

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Signature of Teachers : *N. Tanjana Bhadra*, *Soumitra Maity*

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