

YEAR PLAN 2018– 2019

GRADE X PHYSICS

Term One: June 2018 to August 2018

Term Two: September 2018 to March 2019

Continuous assessments: June, July, September , October, November

First Term Exam: August 2018

Model Exam I: December 2018

Model Exam II: January 2019

Please check the **index page** in the notebooks for Continuous Assessment marks.

ENDURING UNDERSTANDING: The student should understand that physics principles are applicable to their everyday lives.

OBJECTIVES: To

- learn and understand the terms, facts, concepts, definitions, laws, principles and processes of Physics.
- develop the skill to handle apparatus, record observations and draw diagrams, graphs, etc.
- be able to read data and draw conclusions and solve problems.
- discover that there is a living and growing physics relevant to the modern age in which we live.

Internal Assessment Project: 10 experiments from the prescribed syllabus.

DATE OF SUBMISSION OF PROJECT: 5th October 2017

Term One – June 2018 to August 2018

DURATION	TOPIC	SPECIFIC LEARNING OBJECTIVE	ACTIVITIES
June	Sound Refraction of light at plane surfaces	<ul style="list-style-type: none"> • Recalls reflection of sound waves • Differentiates forced, natural vibrations and resonance. • Recalls the characteristics of sound waves • Understands the concept of refraction of light, real and apparent depth. • Applies the concept of refraction & TIR of light in daily life. 	Demonstration of vibrations of different musical instruments. Solves numerical problems. Draws ray diagrams.
July	Refraction through a lens Spectrum	<ul style="list-style-type: none"> • Understands the terms related to lens. • Illustrates the formation of images by convex and concave lenses. • Illustrates dispersion of light. • Understands electromagnetic spectrum and its classifications. 	Draws ray diagrams. Solves numerical problems.
August	Revision Term I examination		
		Term Two-September 2018 to March 2019	
September	Current Electricity Household circuits	<ul style="list-style-type: none"> • Recalls the concepts of potential difference, current ,resistance • Verifies Ohm’s law. • Understands the combination of resistances. • Recalls the concept of electrical power and energy. • Illustrates the transmission of power. • Interprets the use of fuse and switch. • 	Draws circuit diagrams of house wiring. Solves numerical problems.
October	Electromagnetism	<ul style="list-style-type: none"> • Recalls the concept of electromagnetism, electromagnetic induction. • Illustrates the construction of a dynamo, transformer and electric motor. 	Experiment to show electromagnetic induction.(Lab)

	Calorimetry	<ul style="list-style-type: none"> Recalls the terms heat, temperature & latent heat. Understands the change of phases. 	Solves numerical problems.
November	Radioactivity Revision	<ul style="list-style-type: none"> Understands the concept of radioactivity and changes in the nucleus, background radiation and safety precautions, nuclear fission and fusion. 	Seminar on radioactivity.
December	First model examination		
January	Revision Second model examination		
February	Study holidays		
March	Board examination		
Facilitator's name: Mrs. Chinnamma George, Mrs. Renjini Sanjay , Mrs. Rekha S. and Mrs. Annamma T Mathew			
Textbook : Concise Physics Part II			