



# ST. LAWRENCE HIGH SCHOOL

27, BALLYGUNGE CIRCULAR ROAD, KOLKATA - 700019



Session Plan/ Syllabus Coverage for the Academic Year 2026-2027

Subject: Physics

Term: 1<sup>st</sup>

Name of the Subject Co-ordinator: Soumitra Maity

Name of the Book: Concise Physics

No. of Working Days: 38

No. of Periods Available: 22

Class: X

Sections: A, B & C

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	CLASS WORK	TEACHING AIDS
April	9	Ch-1: Force (Page No. 1 to 20)  Ch-2: Work, Energy and Power (Page No. 21 to 51)	Moment of a force and equilibrium, Centre of gravity, Uniform circular motion  Work, Energy and Power, their measurements and units, Different forms of energy, Conservation of energy	Important points and notes related to topics will be given. Important questions and numerical will be discussed from Ex – 1A, 1B & 1C Page No.9-13, 15-16 & 19-20 and Ex –2A, 2B & 2C Page No. – 29-32, 29, 43-46 and 50-51.	Model demonstration on clockwise and anticlockwise torque.
May	6	Ch-3: Machines (Page No. 52 to 74)  Ch-4: Refraction of Light at Plane Surfaces (Page No. 75 to 79)	Machines, Technical Terms and Levers, Pulley, Mechanical advantage, velocity Ratio and efficiency of combination of pulleys  Refraction, Laws of Refraction and Refractive Index	Important points and notes related to topics will be given. Important questions and numerical will be discussed from Ex –3A, Page No 61-64, Ex – 3B Page No. 71-74 Ex –4A, Page No.85-89, Ex –4B, Page No.93-95, Ex –4C, Page No 99-100.	Demonstration of a single fixed pulley and explanation of Load, Effort and M.A. for it.
June	7	Ch-4: Refraction of Light at Plane Surfaces – Continued (Page No. 80 to 110)	Refraction of Light through a Prism, Simple applications of Refraction of Light, Critical angle and Total Internal Reflection	Important points and notes related to topics will be given. Important questions and numerical will be discussed from Ex – 4D, Page No. 107-110.	Experimentation of refraction of light using a glass slab and a laser torch and demonstration of lateral displacement

Teachers are requested to prepare a LESSON PLANS for each Topic month wise.

Signature of the Co-Teachers: 1. *Soumitra Maity*

*[Signature]*

PRINCIPAL

Submitted on: 20.04.26

Academic Co-ordinator: *Chaitali Roy*

VICE PRINCIPAL

*[Signature]*



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Session Plan/ Syllabus Coverage for the Academic Year 2026-2027

Subject: Physics

Term: 1<sup>st</sup>

Name of the Subject Co-ordinator: Soumitra Maity

Name of the Book: Concise Physics

No. of Working Days: 38 + 67

No. of Periods Available: 22+31

Class: X

Sections: A, B & C

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	CLASS WORK	TEACHING AIDS
July	13	Ch-5: Refraction Through a Lens (Page No. 111 to 142)  Ch-6: Spectrum (Page No. 143 to 158)	Lens and Refraction of Light Through a Lens, Formation of Image by a Lens, Sign Convention and Lens Formula, Magnifying Glass and Application of Lenses  Deviation, Dispersion and Spectrum, Electromagnetic Spectrum and Its Broad Classification, Scattering of Light and Its Applications	Important points and notes related to topics will be given. Important questions and numerical will be discussed from Ex - 5A, Page No. - 117-119, Ex - 5B, Page No. 128-131 Ex - 5C, Page No.136-138, Ex - 5D, Page No142, Ex -6A, 6B and 6C, Page No. 147-149, 154-156 and 158.	Experimentation of image formation by a Convex lens at different image distance. And hence explaining- nature of image and linear magnification. Demonstration of dispersion of light by a Prism
<b>Unit Test – 1 begins from 13<sup>th</sup> July. Syllabus for Unit Test – 1: Ch – 1: Force and Ch – 2: Work, Energy and Power</b>					
Aug	11	Ch-7: Sound (Page No. 159 to 187)	Reflection of Sound Waves and Echoes, Natural, Damped and Forced Vibrations, Resonance, Characteristics of Sound & Their Subjective and Objective Nature	Important points and notes related to topics will be given. Important questions and numerical will be discussed from Ex- 7A, Page No.165-167. Ex-7B Page No.176-178, Ex-7C, Page No.185-187.	Demonstration of resonance of sound by tuning fork and resonance tube.
Sept 1 <sup>st</sup> Term Exam begins on 7 <sup>th</sup> Sept	2+5	Revision Ch-3: Machines (Page No. 52 to 74)	Pulley, combination of pulleys Moment of a force and equilibrium,	Previous year's board's papers will be solved	Demonstration of a block and tackle system and explanation of Load, Effort and M.A. for it.
<b>Syllabus for 1<sup>st</sup> term examination – Ch-1:Force, Ch-2:Work, Energy and Power, Ch-3:Machines, Ch-4:Refraction of Light at Plane Surfaces, Ch-5:Refraction Through a Lens, Ch-6:Spectrum and Ch-7: Sound</b>					

Teachers are requested to prepare a LESSON PLANS for each Topic month wise.

Signature of the Co-Teachers: 1. *Soumitra Maity*

*[Signature]*  
PRINCIPAL

Submitted on: 20.04.26

Academic Co-ordinator: *Chaitali Roy*

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# ST. LAWRENCE HIGH SCHOOL

27, BALLYGUNGE CIRCULAR ROAD, KOLKATA - 700019



Session Plan/ Syllabus Coverage for the Academic Year 2026-2027

Subject: Physics

Term: 2<sup>nd</sup>

Name of the Subject Co-ordinator: Soumitra Maity

Name of the Book: Concise Physics

No. of Working Days: 44

No. of Periods Available: 18

Class: X

Sections: A, B & C

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	CLASS WORK	TEACHING AIDS
Oct	8	Ch-8:Current Electricity(Page No. 188 to 227) Ch-9:Household Circuit(Page No. 228 to 243) Ch-10:Electromagnetism(Page No. 244 to 277)	Concept of Charge, Current, Potential, Potential Difference and Resistance, Ohm's Law, Electromotive Force, Terminal Voltage and Internal Resistance of a Cell, Combination of Resistors, Electrical energy and Power, Transmission of Power and House Wiring, Some Essential Components of House Wiring System, Magnetic effect of electric current, Force on a current carrying conductor in a magnetic field and its application in D.C. Motor, Electromagnetic Induction and its application to a.c. generator and transformer.	Important points and notes related to topics will be given.- Important questions and numerical will be discussed from Ex-8B, page no.214-217, Ex-8C, Page no- 225-227, Ex- 9A, page no. 232-233, Ex-9B, page no. 242-243, Ex-10A, page no. 253-256, Ex-10B, page no.261-262, Ex- 10C, page no. 273-277	Model demonstration of simple electric circuit as parallel and series combination of resistors. Model demonstration of household circuit  Model demonstration of Electro Magnetic induction with the help of a bar magnet, a copper coil and a small bulb.
<b>*** Last date of submission of Physics Lab Notebook is 30.10.26 ***</b>					
Nov	10	Ch-11:Calorimetry(Page No. 278 to 300) Ch-12:Radioactivity(Page No. 301 to 325) Revision Ch-8:Current Electricity	Heat capacity, Specific heat capacity and its measurement, Change of phase and latent heat. Atomic structure and radioactivity, Nuclear Fission and Fusion, Electromotive Force, Terminal Voltage and Internal Resistance of a Cell,	Important points and notes related to topics will be given. Important questions and numerical will be discussed from Ex-11A, page no.268-289, Ex-11B, Page No. 298-300 Ex-12A, page no. 315-319 & Ex -12B, Page no.324-325. Previous year's board's papers will be solved	Model demonstration to explain the concept of nuclear binding energy and mass defect with the help of some plastic balls.
Dec	Rehearsal test for ICSE begins on 1 <sup>st</sup> Dec	<b>Syllabus for Rehearsal Test</b> – Ch-1:Force, Ch-2:Work, Energy and Power, Ch-3:Machines, Ch-4:Refraction of Light at Plane Surfaces, Ch-5:Refraction Through a Lens, Ch-6:Spectrum and Ch-7: Sound, Ch-8:Current Electricity, Ch-9:Household Circuit, Ch-10:Electromagnetism, Ch-11:Calorimetry, Ch-12:Radioactivity			

Teachers are requested to prepare a LESSON PLANS for each Topic month wise.

Signature of the Co-Teachers: 1. *Soumitra Maity*

Submitted on: 20.04.26

Academic Co-ordinator: *Chaitali Roy*

*[Signature]*

PRINCIPAL

VICE PRINCIPAL

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