

Annual & Weekly Syllabus Split-Up - 2026-27
Class- XI Subject- Physics

S.No	Month	No. of Working Days	No. of Days	Topic	Sub Topic	Teaching Aids/ Resources	Classroom Teaching Video Link	Activities	Art Integrated Project	Pedagogy Process/Teaching Strategy	Chapterwise Notes link	Assessment	
3	JUNE	20	Week 1	0	Units and Measurements								
			Week 2	6		Mathematical formula useful in physics, Need for measurement Units of measurement; systems of units; SI units, quantities,	NCERT, Senses Board, You Tube Videos, Vernier callipers,		To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Callipers and hence find its volume.		Interactive, Conceptual, Experimental Practice	https://docs.google.com/document/d/1j1VOU4vw65FN_mqJL7NeaetO7_uMrYa7/edit?usp=sharing&oid=108594730467470335879&rtfpof=true&sd=true	
			Week 3	6		dimensional analysis and its applications.	NCERT, Senses Board, screwgauge,		To measure diameter of a given wire and thickness of a given sheet using screw gauge.		Interactive, Conceptual, Experimental Practice		Class Test
			Week 4	6	Motion in a Straight Line	Frame of reference, Motion in a straight line,	Senses board, Ncert, spherometer	https://www.youtube.com/watch?v=3yUjX376_U	To determine radius of curvature of a given spherical surface by a spherometer.		Interactive, Conceptual, Experimental Practice		
			Week 5	2		Elementary concepts of differentiation and integration for describing motion, uniform and non uniform motion	Senses board, Ncert	https://www.youtube.com/watch?v=VffF3F-G9Uk			Interactive, Conceptual, Practice	https://docs.google.com/document/d/1SK_jvyYbDISW6z6DQU4acj5KcdUAu9r9/edit?usp=sharing&oid=108594730467470335879&rtfpof=true&sd=true	Class Test
Week 1	4		instantaneous velocity, uniformly accelerated motion, velocity - time and position-time graphs. Relations for uniformly accelerated motion (graphical treatment).	Senses board, Ncert					Interactive, Conceptual, Practice				
Week 2	6	Motion in a Plane	Scalar and vector quantities; position and displacement vectors, general vectors and their notations; equality of vectors, multiplication of vectors by a real number; Addition and subtraction of vectors, Unit vector; resolution of a vector in a plane, rectangular components,	Senses board, Ncert	https://www.youtube.com/watch?v=We4QOHZEy9w	To find the weight of a given body using parallelogram law of vectors.			Interactive, Conceptual, Experimental Practice	https://docs.google.com/document/d/1z11LcAhdZWrhNoXqpKfer91ydt5HN4d/edit?usp=sharing&oid=108594730467470335879&rtfpof=true&sd=true	Class Test		
Week 3	6		Scalar and Vector product of vectors. Motion in a plane, cases of uniform velocity and uniform acceleration projectile motion, uniform circular motion.	Senses board, Ncert	https://www.youtube.com/watch?v=TyxIVLqQMVC				Interactive, Conceptual, Practice				

4	JULY	27	Week 4	6	Laws of Motion	Intuitive concept of force, Inertia, Newton's first law of motion; momentum and Newton's second law of motion; impulse; Newton's third law of motion. Law of conservation of linear momentum and its applications. Equilibrium of concurrent forces, Static and kinetic friction, laws of friction, rolling friction, lubrication. Dynamics of uniform circular motion: Centripetal force, examples of circular motion (vehicle on a level circular road, vehicle on a banked road).	Senses board, Ncert	https://www.youtube.com/watch?v=nRSV1Y4XlhU			Interactive, Conceptual, Practice	https://docs.google.com/document/d/1iXRuoW6f15xswReitYpvkMQpf48m7ji/edit?usp=sharing&oid=108594730467470335879&rtopof=true&sd=true	Class Test
			Week 5	5	Work, Energy and Power	Work done by a constant force and a variable force; kinetic energy, work-energy theorem, power.	Senses board, Ncert	https://www.youtube.com/watch?v=GSTW7Mla0as			Interactive, Conceptual, Practice	https://docs.google.com/document/d/1jhmtPWrtJ8aMOYgFQI5Of2pULiB9_a4/edit?usp=sharing&oid=108594730467470335879&rtopof=true&sd=true	
5	AUGUST	24	Week 1	1		Notion of potential energy, potential energy of a spring, conservative forces: non-conservative forces, motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.	PRE MID TERM EXAM	https://www.youtube.com/watch?v=M2xnGcaaAid			Interactive, Conceptual, Practice		Class Test
			Week 2	6	System of Particles and Rotational Motion	Centre of mass of a two-particle system, momentum conservation and Centre of mass motion. Centre of mass of a rigid body; centre of mass of a uniform rod. Moment of a force, torque, angular momentum, law of conservation of angular momentum and its applications	PRE MID TERM EXAM	https://www.youtube.com/watch?v=T-ogHwmKvng			Interactive, Conceptual, Practice	https://docs.google.com/document/d/1DDhzxcdpUWq0FxyReRbJLmH-VnCzaagC/edit?usp=sharing&oid=108594730467470335879&rtopof=true&sd=true	
			Week 3	5		.Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motions. Moment of inertia, radius of gyration, values of moments of inertia for simple geometrical objects (no derivation).	Senses board, Ncert				Interactive, Conceptual, Practice		Class Test

			Week 4	6	Gravitation	Kepler's laws of planetary motion, universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth. Gravitational potential energy and gravitational potential, escape speed, orbital velocity of a satellite.	Senses board, Ncert	https://www.youtube.com/watch?v=GmD06q8bIYM	Using a simple pendulum, plot its L-T ² graph and use it to find the effective length of second's pendulum.		Interactive, Conceptual, Experimental Practice	https://docs.google.com/document/d/1PTqDr_pGj8qz_Om3gTmMeNpCLx86Uod/edit?usp=sharing&oid=108594730467470335879&rtfpof=true&sd=true	
			Week 5	5+1	Revision	Revision	Revision				Interactive, Conceptual, Practice		Class Test
			Week 1	5	TERM-1			TERM-1			Interactive,		
			Week 2	6							Explanation, Practice		
			Week 3	5									
6	SEPTEMBER	23	Week 4	5	Mechanical Properties of Solids	Elasticity, Stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear modulus of rigidity (qualitative idea only), Poisson's ratio; elastic energy.	Senses board, Ncert	https://www.youtube.com/watch?v=XzSlyM4JSQ			Interactive, Conceptual, Practice	https://docs.google.com/document/d/1lQuIFa-UXs14R01d8JPgkzRkYv5Rkf/edit?usp=sharing&oid=108594730467470335879&rtfpof=true&sd=true	
			Week 5	3	Mechanical Properties of Fluids	Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes), effect of gravity on fluid pressure. Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, critical velocity,	Senses board, Ncert	https://www.youtube.com/watch?v=VvDjyhYSjv8			Interactive, Conceptual, Practice	https://docs.google.com/document/d/1VVJPOc-WwpzHjTeWl3mwBQgIV8QqIkGR/edit?usp=sharing&oid=108594730467470335879&rtfpof=true&sd=true	
			Week 1	2	Thermal Properties of Matter	Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension ideas to drops, bubbles and capillary rise. Bernoulli's theorem and its simple applications.	Senses board, Ncert	https://www.youtube.com/watch?v=iuGSlizpWEQ			Interactive, Conceptual, Practice		Class Test
7	OCTOBER	25	Week 2	6	Thermal Properties of Matter	Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; Cp, Cv - calorimetry;	Senses board, Ncert	https://www.youtube.com/watch?v=k8mU13D1sAO			Interactive, Conceptual, Practice	https://docs.google.com/document/d/18KMwQ5Mu15Ofhvmj3F8CSokPb60DIYbc/edit?usp=sharing&oid=108594730467470335879&rtfpof=true&sd=true	
			Week 3	6		change of state - latent heat capacity. Heat transfer - conduction, convection and radiation, thermal conductivity,	NCERT, Senses Board,				Interactive, Conceptual, Practice		Class Test
			Week 4	5		qualitative ideas of Blackbody radiation,	NCERT, Senses Board,				Interactive, Conceptual, Practice		
			Week 5	5		Wein's displacement Law, Stefan's	NCERT, Senses Board,				Interactive, Conceptual, Practice		Class Test
			Week 1	0									
			Week 2	0									
			Week 3	0									
8	NOVEMBER	12	Week 4	6	Thermodynamics	Thermal equilibrium and definition of temperature, zeroth law of thermodynamics, heat, work and internal energy. First law of thermodynamics,	Senses board, Ncert				Interactive, Conceptual, Practice	https://docs.google.com/document/d/1cAilsQVeTnkbzhjXgmZdhr5I4SbYBA/edit?usp=sharing&oid=108594730467470335879&rtfpof=true&sd=true	

