Annual & Weekly Syllabus Split-Up - 2025-26 Class- XI Subject- Physics

S.No	Month	No. of Working Days		No. of Days	Topic	Sub Topic	Resources	Activity	Periodic Test 1	Pre Mid Term	Term-1	Post Mid Term	Annual		
			Week 1	0											
		-	Week 2	6	Units and Measurements	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.		٧	٧		V		
3	JUNE	19	Week 3	6		dimensional analysis and its applications.	NCERT, Senses Board,	To measure diameter of a given wire and thickness		1	N.				
			Week 4	6		Frame of reference, Motion in a straight line,	screwgauge, Senses board, Ncert, spherometer	of a given sheet using screw gauge. To determine radius of curvature of a given spherical surface by a spherometer.		v √	v √		<u>v</u> √		
			Week 5	1	Motion in a	Elementary concepts of differentiation and integration for describing motion, uniform and non uniform motion	Senses board, Ncert			٧	٧		v		
			Week 1	5	Straight Line	instantaneous velocity, uniformly accelerated motion, velocity - time and position-time graphs. Relations for uniformly accelerated motion (graphical treatment).	Senses board, Ncert			٧	٧		ı√		
				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	To find the weight of a given body using parallelogram law of vectors.			٧		√	
4	JULY	27	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				٧		ı√		
			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				٧		v		
					Week 5	4		Work done by a constant force and a variable force; kinetic energy, work-energy theorem, power.	Senses board, Ncert				٧		ıv
	AUGUST		Week 1	2	Work, Energy and Power	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				٧		v		

	Week 2	System of Particles and	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			V		٧
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					notational								
5		23			Motion	.Equilibrium of rigid bodies, rigid body rotation and	Senses board, Ncert						
					IVIOLIOII	equations of rotational motion, comparison of linear and							
			Week 3			rotational motions. Moment of inertia, radius of							
						gyration, values of moments of inertia for simple							
				5		geometrical objects (no derivation).				٧		٧	
						Kepler's laws of planetary motion, universal law of	Senses board, Ncert						
						gravitation. Acceleration due to gravity and its variation	•	Using a simple pendulum, plot its L-T2 graph and					
			Week 4		Gravitation	with altitude and depth. Gravitational potential energy		use it to find the effective length					
						and gravitational potential, escape speed, orbital		of second's pendulum.					
				6		velocity of a satellite.				٧		٧	
			Week 5	5	Revision	Revision	Revision						
			Week 1	5									
			Week 2 6	6		MID TERM EXAM MID TERM EXAM							
			Week 3	6	_								
						Mechanical	Elasticity, Stress-strain relationship, Hooke's law, Young's	Senses board, Ncert					
					Week 4		Properties of	modulus, bulk modulus, shear modulus of rigidity					
6	SEPTEMBER	25	WEEK 4		Solids	(qualitative idea only), Poisson's ratio; elastic energy.							
	JET TEIVIBER	23		6	Solids						٧	٧	
						Pressure due to a fluid column; Pascal's law and its	Senses board, Ncert						
			Week 5			applications (hydraulic lift and hydraulic brakes), effect							
						of gravity on fluid pressure. Viscosity, Stokes' law,							
						terminal velocity, streamline and turbulent flow, critical							
				2	Mechanical	velocity,					٧	٧	
						Surface energy and surface tension, angle of contact,	Senses board, Ncert						
				Week 1	Fluids	excess of pressure across a curved surface, application of							
			Week 1			surface tension ideas to drops, bubbles and capillary							
			WCCK I			rise.Bernoulli's theorem and its simple applications.							
				3		llast target as the small superior the small					٧	٧	
							Senses board, Ncert						
7	OCTOBER	13				expansion of solids, liquids and gases, anomalous							
,	OCTOBER	15	Week 2		Thermal	expansion of water; specific heat capacity; Cp, Cv -							
			WCCK Z	WCCK 2	Properties of	calorimetry; change of state - latent heat capacity.Heat							
					Matter	transfer-conduction, convection and radiation, thermal							
				6		conductivity,						٧	
			Week 3				NCERT, Senses Board,						
				4		Law, Stefan's law .						٧	
			Week 4	0								٧	
1			Week 5	0	1							٧	

			Week 1	0							٧
					Thermodynamic	Thermal equilibrium and definition of temperature,	Senses board, Ncert				
			Week 2			zeroth law of thermodynamics, heat, work and internal					
				5		energy. First law of thermodynamics,					٧
							Senses board, Ncert				
			Week 3			Second law of thermodynamics: gaseous state of matter,					
	i '		week 3			change of condition of gaseous state -isothermal,					
				6		adiabatic, reversible, irreversible, and cyclic processes.					٧
8	NOVEMBER	23					Senses board, Ncert				
						Equation of state of a perfect gas, work done in	·				
			Week 4			compressing a gas. Kinetic theory of gases - assumptions,					
						concept of pressure. Kinetic interpretation of					
				6		temperature; rms speed of gas molecules;					٧
					1	degrees of freedom law of equi-partition of energy	Senses board, Ncert				
						(statement only) and application to specific heat	,				
			Week 5			capacities of gases; concept of mean free path,					
				6	Kinetic Theory	Avogadro's number.					V
					,		Senses board, Ncert				·
	1 1		Week 1			as a function of time, periodic functions and their					
			Week 1	6		applications.					v
					To study the relation between frequency and length			•			
		20	Week 2			Simple harmonic motion (S.H.M) and its equations of	Senses soura, meere	of a given wire under constant			
9				6		motion; phase; oscillations of a loaded spring-		tension using sonometer.			V
	DECEMBER						Senses board, Ncert	To study the relation between the length of a given			
			Week 3			restoring force and force constant; energy in S.H.M.	,	wire and tension for constant			
				6		Kinetic and potential energies;		frequency using sonometer.			٧
			Week 4				Senses board, Ncert				
			Week 4	6	Oscillations	simple pendulum derivation of expression for its time period.					٧
			Week 5	3			Senses board, Ncert				
			Week 1	0			Senses board, Ncert				
							Senses board, Ncert				
			Week 2			Wave motion: Transverse and longitudinal waves, speed of		To find the speed of sound in air at room			
			WEEK 2			travelling wave, displacement relation for a progressive wave,		temperature using a resonance tube by two			
10	JANUARY	22		6	Waves	principle of superposition of waves,		resonance positions.			
10	JANJANI			Senses board, Ncert							
			Week 3			reflection of waves, standing waves in strings and organ pipes,					
				5		fundamental mode and harmonics, Beats.		<u> </u>			
			Week 4	6	Revision	Revision	Senses board, Ncert				
			Week 5	5	Revision	Revision	Senses board, Ncert				
			Week 1	6	Revision	Revision	Senses board, Ncert	<u> </u>	 	<u> </u>	<u> </u>
			VVCCKI	0							
			Week 2	6	Revision	Revision	Senses board, Ncert			 L	
11	FEBRUARY	23			Revision	Revision Annual Examination	Senses board, Ncert Annual Examination				
11	FEBRUARY	23	Week 2	6	Revision		,				
11	FEBRUARY	23	Week 2 Week 3	6	Revision	Annual Examination	Annual Examination				
11	FEBRUARY	23	Week 2 Week 3 Week 4	6 5 6	Revision	Annual Examination	Annual Examination				
11	FEBRUARY	23	Week 2 Week 3 Week 4 Week 5	6 5 6 0	Revision	Annual Examination	Annual Examination				
11	FEBRUARY MARCH	23	Week 2 Week 3 Week 4 Week 5 Week 1	6 5 6 0 5	Revision	Annual Examination	Annual Examination				
			Week 2 Week 3 Week 4 Week 5 Week 1 Week 2	6 5 6 0 5 6	Revision	Annual Examination	Annual Examination				