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

	Class- XII Subject-Physics															
S.No	Month	No. of Working Days		No. of	Торіс	Sub Topic	Resources	Activity	Mid April Test	Periodic Test 1	Pre Mid Term	Mid Term	Preboard-1	Preboard-2	Practice Test-1	Preboard-
1			Week 1	5	Electric Charges and Fields	Electric charges, Conservation of charge, Coulomb's law-force between two- point charges, forces between multiple charges; Superposition principle and continuous charge distribution. Electric field, electric field due to a point charge, electric field lines, electric dipole, electric field due to a dipole, torque on a dipole in uniform electric field. Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside).	NCERT, Senses Board, You Tube videos, voltmeter, ammeter, rheostat, switch, battery elliminator	To find resistance of a given wire / standard resistor using metre bridge.	٧			٧	٧	٧	V	V
	APRIL	23	Week 2	5	Electrostatic Potential and Capacitance	land of electric dipole in an electrostatic	NCERT, Senses Board, You Tube videos, meter bridge, rheostat, switch, battery elliminator, resistance box	To verify the laws of combination (series) of resistances using a metre bridge.	v			٧	v	٧	V	V
			Week 3	4	Current Electricity	Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current; Ohm's law, V-I characteristics (linear and non-linear), electrical energy and power, electrical resistivity and conductivity, temperature dependence of resistanceInternal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel, Kirchhoff's rules, Wheatstone bridge.	NCERT, Senses Board,	, , ,		V		V	v	V	V	V
			Week 4	6	Moving Charges and Magnetism	Concept of magnetic field, Oersted's experiment. Biot - Savart law and its application to current carrying circular loop. Ampere's law and its applications to infinitely long straight wire. Straight solenoid (only qualitative treatment), force on a moving charge in uniform magnetic and electric fields.	NCERT, Senses Board, moving coil galvanometer, resistance box ammeter, voltmeter	To determine resistance of a galvanometer by half-deflection method and to find its Figure of merit		٧		٧	V	V	٧	V
			Week 5	3		Force on a current-carrying conductor in a uniform magnetic field, force between two parallel current-carrying conductors-definition of ampere,				٧		√	٧	V	V	٧
			Week 1	0								٧	V	V	V	٧

		-													
						Torque experienced by a current loop in uniform	NCERT, Senses Board, bar magnet	To convert the given							
						magnetic field; Current loop as a magnetic dipole and		galvanometer (of known							
			Week 2			its magnetic dipole moment, moving coil		resistance and figure of merit)							
						galvanometer- its current sensitivity and conversion		into a voltmeter of desired							
				6		to ammeter and voltmeter.		range and to verify the same.		٧	٧	٧	٧	٧	V
					Magnetics and	Bar magnet, bar magnet as an equivalent	NCERT, Senses Board,								
					Magnetism and Matter	solenoid (qualitative treatment only), magnetic									
					Matter	field intensity due to a magnetic dipole (bar									
2	JUNE	19				magnet) along its axis and perpendicular to its									
			Week 3			axis (qualitative treatment only), torque on a									
						magnetic dipole (bar magnet) in a uniform		To assemble a household circuit							
						magnetic field qualitative treatment only),		comprising three bulbs, three							
						magnetic field lines.		(on/off) switches, a fuse and a							
				6		magnetic neid lines.		power source.		٧	٧	٧	٧	٧	٧
						Magnetic properties of materials- Para-, dia- and	NCERT, Senses Board,								
			\A/= = . 4		Electromagnetic	ferro - magnetic substances with examples,									
			Week 4		Electromagnetic Induction	Magnetization of materials, effect of	ials effect of								
				_	induction	temperature on magnetic properties.		4. To assemble the components		.,	.,	.,	.,	.,	.,
			Week 5	6		Exercise Questions	NCERT, Senses Board,	of a given electrical circuit. Numericals		v ./	V	v	V	V	V
			week 3	1		Electromagnetic induction; Faraday's laws,	NCERT, Senses Board,	Numericals		v	V	V	V	v	v
			Week 1			induced EMF and current;Lenz's Law, Self and	NCERT, Senses board,								
				5		mutual induction.		Notes Preperation		V	v	v	V	V	V
							NCERT, Senses Board,			1			Ť		
							transformer model	6. To draw the diagram of a							
					Alternating			given open circuit comprising at							
					Current			least a battery,							
			Week 2		darrent	Alternating currents, peak and RMS value of		resistor/rheostat, key, ammeter							
						alternating current/voltage; reactance and		and voltmeter. Mark the							
						impedance; LCR series circuit (phasors only),		components that are not connected in proper order and							
						resonancepower in AC circuits, power factor,		correct the circuit and also the							
				6		wattless current. AC generator, Transformer.		circuit diagram.			v/	1/	N/	1	,,
				0		Basic idea of displacement current,	NCERT, Senses Board,	circuit diagraini			•	·	•	v	v
						Electromagnetic waves, their characteristics,	Electromagnetic								
						their transverse nature (qualitative idea only).	spectrum chart								
3	JULY	27			Electromagnetic	Electromagnetic spectrum (radio waves,	spectrum chart								
			Week 3		Waves	microwaves, infrared, visible, ultraviolet, X-rays,									
						gamma rays) including elementary facts about									
						their uses.									
				6				Notes Preperation			٧	V	٧	٧	٧
					Ray Optics and	Reflection of light, spherical mirrors, mirror	NCERT, Senses Board,	To find the value of v for							
					Optical	formula, refraction of light, total internal	convex and concave	To find the value of v for different values of u in case of a							
			Week 4		Instruments	reflection and optical fibers refraction at	mirrors	concave mirror and to find the							
						spherical surfaces, lenses, thin lens formula		focal length.							
				6							1	٧	٧	٧	٧
						lens maker's formula, magnification, power of a	NCERT, Senses Board,	To determine angle of minimum							
						lens, combination of thin lenses in contact,	convex and concave	deviation for a given prism by							
			Week 5			refraction of light through a prism.Optical	lense straveling	plotting a graph between angle							
						instruments: Microscopes and astronomical	microscope	of incidence and angle of							
				4		telescopes (reflecting and refracting) and their		deviation.				.,	,,	.,	.,
		l		4	l	magnifying powers.	l			<u> </u>	1	V	V	V	V

								·		-					
							NCERT, Senses Board,								
						Wave front and Huygen's principle, reflection	You Tube videos								
						and refraction of plane wave at a plane surface									
						using wave fronts. Proof of laws of reflection									
			Week 1			and refraction using Huygen's principle.									
						Interference, Young's double slit experiment and									
					Wave optics	expression for fringe width (No derivation final									
				2		expression only)		Natas Bassasstian		.,		.,	.,		.,
					4	expression only)	NCERT Course Reserve	Notes Preperation		V		V	v	V	V
						coherent sources and sustained interference of	NCERT, Senses Board,								
			Week 2			light, diffraction due to a single slit, width of									
4	AUGUST	23				central maxima (qualitative treatment only).									
4	AUGUST	23		5		(Notes Preperation		٧		٧	٧	٧	٧
							NCERT, Senses Board,								
			Week 3			Dual nature of radiation, Photoelectric effect,		To determine refractive index of							
			···cens			Hertz and Lenard's observations; Einstein's		a glass slab using a travelling							
				5	Dual Nature of	photoelectric equation-particle nature of light.		microscope.				٧	٧	V	٧
					Radiation and		NCERT, Senses Board,					V V V			
1					Matter			To observe refraction and lateral							
1			Week 4			Experimental study of photoelectric effect		deviation of a beam of light							
						Matter waves-wave nature of particles, de-		incident obliquely on a							
				6		Broglie relation.		glass slab.				٧	٧	٧	٧
)A/I. F		Davidata	Devided an	NCERT, Senses Board,								
			Week 5	5	Revision	Revision	,								
			Week 1		Torm 1	Term 1	Term 1	Term 1							
			week 1	5	Term 1	Term 1	Term 1	Term 1							
i			Week 2		Term 1	Term 1	Term 1	Term 1							
				6		161111 1	I CI III I								
			Week 3	6	Term 1	Term 1	Term 1	Term 1	no nature and size of						
	SEPTEMBER	25				Alpha-particle scattering experiment;	NCERT, Senses Board,	To study the nature and size of							
						Rutherford's model of atom; Bohr model of		the image formed by a (i) convex							
						hydrogen atom, Expression for radius of nth		lens, or (ii)							
5			Week 4	4	Atoms	possible orbit, velocity and energy of electron in		concave mirror, on a screen by							
3			VVCCK 4			nth orbit, hydrogen line spectra (qualitative		using a candle and a screen (for							
						treatment only).		different							
						treatment only).		distances of the candle from the							
				6				lens/mirror).				٧	٧	٧	٧
						Composition and size of nucleus, nuclear force	NCERT, Senses Board,								
						Mass-energy relation, mass defect; binding	You Tube videos								
1			Week 5	-		energy per nucleon and its variation with mass		To identify a diode, an LED, a							
1						number; nuclear fission, nuclear fusion.		resistor and a capacitor from a							
		1		2	Nuclei	, and the state of		mixed collection of such items.				V	٧	٧	V
	1		Week 1	3	1			Notes Preperation			1	V	V	V	V
			cck 1	3	 	Energy bands in conductors, semiconductors	NCERT, Senses Board,	reperation		+	+	ľ	V	V .	·
							inclini, selises budiu,								
1			Week 2		Semiconductor	and insulators (qualitative ideas only), Intrinsic		L							
1			week 2		Electronics:	and extrinsic semiconductors- p and n type, p-n		To draw the I-V characteristic							
					Materials,	junction		curve for a p-n junction diode in				1.			1.
6	OCTOBER	13		6	Devices and			forward andreverse bias.			1	٧	٧	٧	٧
U	OCTOBER	13			Simple Circuits		NCERT, Senses Board,								
			Week 3			and reverse bias, application of junction diode -diode									
				4	<u> </u>	as a rectifier.		Notes Preperation			1	٧	٧	٧	٧
			Week 4												
				0	ļ								-		
			Week 5												
<u> </u>	1			0	1						+	-	1		
			Week 1	_											
				0	1						-		1		
			Week 2	_	DD 4		NCERT, Senses Board,								
				5	PB-1		Worksheets					1			1

7	NOVEMBER	23	Week 3				NCERT, Senses Board,									
,	NOVENIBER	23	week 3	6	PB-1		Worksheets									
			14/I: 4				NCERT, Senses Board,									
			Week 4	6	PB-1		Worksheets									
							NCERT, Senses Board,									
			Week 5	6	Revision	Revision	Sample Papers									
					1101011	The Tislett	NCERT, Senses Board,									
			Week 1	6	Revision	Povision										
				0	Kevision	n Revision Sample Papers										
			Week 2	6	PB-2											
				0	PB-Z											
8	DECEMBER	20	Week 3													
				6	PB-2											
			Week 4													
				6	Practice Test-1											
			Week 5													
			Weeks	3	Practice Test-1											
			Week 1													
			Week 1	0												
			Week 2	6	PB-3											
9																
	JANUARY	22	Week 3	5	PB-3											
			Week 4	6	PB-3											
					. 5 5											
			Week 5	5	Board Practical	Board Practical										
				J	Board Fractical	Board Fractical										
			Week 1	6	Board Practical	Board Practical										
				0	Board Fractical	Board Fractical										
			Week 2	_												
				6	Board Practical	Board Practical										
10	FEBRUARY	23	Week 3	(3)												
				5												
			Week 4													
			WCCK 4	6												
			Week 5													
			week 3	0												
			Week 1	5												
			Week 2	6												
1																
11	MARCH	22	Week 3	5												
									-						1	
			Week 4	5												
				3											•	
			Week 5	4												
			i l	1												