		ACADEMIC PLANNER	,CLASS X11; Physic	cs.(2023-2024)	
Date / Day	chapter/contents	Teaching pedagogy	mode of	No. Of	Activities/practicals
			assesment	Assignments/H.W	
April	(Chapter 1)Electric charges and fields				
115	Introduction				
(09 days)	Electric charges			Cw:NCERT numericals(examples and conceptual questions)	
	Conductor and Insulator				To determine resistance per cm of a given wire by plotting a graph of potential difference versus current.
	Charging by induction	paper and comb activity.		Hw: Assignment of electrostatics	
	Basic properties of electric charges	Activity based learnibg.			
	Coulomb'law				
	Forces between multiple charges				
	Electric field				
	Electric field lines				
	Electric flux	Learning from daily life example.			To assemble components of given electric circuit
	Electric dipole				
	Dipole in uniform electric field				
	Continuous charge distribution		Test of electrostatics -i (based on conceptual question and numericals)		
	Gauss's law				
	Application of gauss's law				

April	(Chapter 2)Electrostatic				
	potential and capacitance			<u> </u>	
(16-30)	Introduction			<u> </u>	
(11 days)	Potential due to an electric dipole				To draw the diagram of open circuit
	Equipotential surfaces				To find resistance of a given wire using meter bridge hence determine the specific resistance of its material.
	Potential energy due to system of charges				hence determine the specific resistance of its material
	Electrostatic of conductors		Class test -ii, test of electrostatics- ii(Derivation & numerical based)		
	Dielectric and polarisation				
	The parallel plate capacitor	lecture cum demonstration.			To verify the laws of combination of resistance
	Effect of dielectric on capacitance				
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	<b>_</b>		REVISION	<u> </u>	4
	ļ		Gauss's law		
			Equipotential surfaces		
			The parallel plate capacitor		
	(Chapter 3)				
	Current electricity			Cw:N.C.E.R.T. examples & questions will be done	
	Introduction				
	Electric current			Hw:N.C.E.R.T questions	
	Electric currents in conductors	Storytelling			

	Ohm's law				
	Drift velocity and mobility		Test of currentelectricity		
	V-I characterstics (linear & non linear)		M.C.Q.based on numericals related to electricity		
	Resistivity and conductivity				
	Temperature dependence of resistivity				
	Cells, emf,internal resistance				
	Cells in series and in parallel				
	Kirchhoff's laws			Assignment will be given at the end of chapter	
	Wheatstone bridge	lecture cum demonstration			
			KIRCHNOIT STAWS		
May	(Chapter 4)				
(1-15)	Magnetic effect of current and magnetism				
(11 days)	Introduction			Cw:NCERT questions will be done	
	Magnetic field				
	Biot-savart law & its applications				UT I chapter 1,2,3
	Ampere's circuital law & its applications,	Peer group learning			
	Force on moving charge in uniform electric and magnetic field.				To determine resistance of a galvanometer by half defection method and find its figure of merit

	Forces between two parallel currents		Test of magnetic effect will be taken	Hw:NCERT questions	
	Torque on current loop.magnetic dipole				
	The moving coil galvanometer	Lecture cum demonstration.			
	Conversion of galvanometer into ammeter and voltmeter			Assignment will be given at the end of chapter	
					To demonstate various part of moving coil galvanometer.
	(Chapter 5)				
JULY	Magnetism and Matter				
115	Introduction				
(12 days)	Current loop as magnetic dipole				
	Magnetic field intensity due to bar magnet	Lecture cum demonstration.			
	Torque on a dipole in uniform magnetic field				
	Magnetic field lines				
	Earth's magnetic field & magnetic elements				
	Para,ferro & dia-magnetic substances				
	Electromagnets,permanent magnets				Showing them behaviour of different substances in magnetic field.
			REVISION	Cw: Conceptual questions &numericals	
			Element of earth magnetic field		
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	(Chapter 6)				
	Electromagnetic induction				
	Introduction			Hw:Assignment of chapter	
	Faraday and henry 's experiment	Lecture cum demonstration.			
	Lenz's law and conservation of energy				
	Motional electromotive forces	Story telling based on daily life example			
	Energy consideration:a quantitative study				
	Eddy currents				
	Inductance		Test of E.M.I.		
	A.C generator	Lecture cum demonstration.			
JULY					
(15-31)	(Chapter 7)				
(12 days)	Alternating current				
	Peak & rms values				To find frequency of a.c. Mains using sonometer.
	A.C. voltage applied to r,l,c.	Peer group learning	REVISION		
	Phasor diagram		N.P. on L.C.R.		
	A.C. voltage applied to lcr circuit		Lenz's law		
	Power in ac circuit:the power factor		Inductance		
	L.C. oscillations		Test of A.C.(conceptual based)		
	Transformers				

				Cw:NCERT & extra	
				questions will be done	
	(Chartor 08)	+	<u>_</u>		
	(Chapter U8)	+			
	Electromagnetic wave				
August	Displacement current	Animated video		Assignment of e.m wave(conceptual based & numericals based)	
(115)	E.M. waves				
(11 days)	E.M.spectrum				
	(Chapter 9)				
	Ray optics and optical instruments			Assignment of ray optics	To find focal length of convex lens
	Reflection of light by spherical mirrors	Lecture cum demonstration.		(Conceptual based & Numericals based)	
	Refraction				
August	Lens makers formula				
(16-31)	Combination of lenses	Lecture cum demonstration.			
(13 days)	Dispersion,		Test of ray optics		To show variation in size of image through concave mirror or convex lens (using candle and screen)
	Optical instruments	Lecture cum demonstration.		Cw:NCERT questions will be done	
	(Chapter 10)				
	wave optics				To find focal length of concave mirror using u-v Graph.
	Huygen's principle				
	Reflection and refraction of a plane wave	Memorization by relating with daily life example.			To find R.I.of a Liquid using a convex lens and a plane mirror.
	Coherent and Incoherent:addition of waves				

	Interference of light				
	Young's experiment	Animated Video			To find angle of minimum deviation by plotting graph.
	Diffraction		Test of wave optics	Hw:Assignment of wave optics	
			REVISION		
			Conceptual problem based on interference,		Activity of polaroid
			N.P.based on telescope and microscope		
Sept.	Revision				
115					
(11days)					
Sept.			Term I examination	Term I exams Chapter 1 to8	
(16-31)					1
(12 days)			\		
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Oct	(Chapter 11)	<u> </u>		<u> </u>	4
(1-15)	dual nature of radiation and matters				
(10 days)	Electron emission				
	Photo electric effect				
	Experimental study of photoelectric effect				
	Photoelectric effect and wave theory of light				
	Einstein's photoelectric equation				

	Particle nature of light:the				
	Wave nature of light		Class test based on graph on Einstain equation	Hw:assignment of chapter	
	(Chapter 12)				
	Atoms				
	Alpha particle scattering	Audio& Visual Aid			
	Rutherford's nuclear model of atom				
	Atomic spectra				To find lateral displacement using glass slab.
	Bohr's model of the hydrogen atom				
	The line spectra of hydrogen atom				
Oct	Chapter -13				
(16-31)	Nuclei				
(09 days)	Atomic massses and Composition of Nucleus	Audio& Visual Aid	Class test based on hydrogen spectra	Hw:assignment of chapter	
	Size of nucleus				
	Nuclear forces				
	Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number				
	Nuclear energy				
Nov	(Chapter 14)				

(1-15)	Semiconductor Electronics			Hw:Assignment of	UT II Chapter 9,10,11,12
(00 deve)	Classification of comissenductor	Ctom/ tolling		chapter	
(09 days)	Classification of semiconductor	Story telling			
	p-n junction				To show characteristics of p-n
					diode(forward and reverse bias).
	Semiconductor diode	Quiz			
	Application of junction diode as	Project-based			
	a rectifier	learning			
					To identify
					capacitor, diode, resistor, ic, transistor
					from the given mixture.
			Test of		
			semiconductors(appl		
			ication based)		
			REVISION		
	Revision of syllabus				
Dec.			Preboard		Entire syllabus.
			Examination		
(1-15)					
12 days					
Dec.					
(15-31)					
13 days					

