

ACA/DI/15	11th Std Teaching Plan	Academic Year 2026-27
Rev:00		
Date:16/09/2025		

STREAM: SCIENCE

SUBJECT: PHYSICS 054

STANDARD: XI A, B, C

PHYSICS DEPARTMENT

Chapter No.	Topic	No. of lecture allotted	Sub Topic	Date of Commencing	Media/ Teaching Aid
1	Units And Measurement	13	Introduction, System of Units,	22-Jul-26	White Board, Marker
			Conventions of SI units	23-Jul-26	White Board, Marker
			Measurements of length, Measurement of Mass	24-Jul-26	White Board, Marker
			Use of Dimensional Analysis and its Limitations	27-Jul-26	White Board, Marker
			Use of Dimensional Analysis and its Limitations	26-Jul-26	White Board, Marker
			Use of Dimensional Analysis and its Limitations	27-Jul-26	White Board, Marker
			Accuracy, Precision and Uncertainty in measurement	28-Jul-26	White Board, Marker
			Estimation of Errors	29-Jul-26	White Board, Marker
			order of magnitude	30-Jul-26	White Board, Marker
			Parallax error	3-Aug-26	White Board, Marker
			Combination of Errors, Significant Figures	4-Aug-26	White Board, Marker

			Numericals	5-Aug-26	White Board, Marker
			Numericals	6-Aug-26	White Board, Marker
2	Mathematical Methods	12	Introduction, Vector Analysis, Vector Operations.	7-Aug-26	White Board, Marker
			Triangle law of vector addition,	8-Aug-26	White Board, Marker
			Law of Parallelogram,	10-Aug-26	White Board, Marker
			Scalar Product and Vector Product	11-Aug-26	White Board, Marker
			Resolution of Vectors	12-Aug-26	White Board, Marker
			Introduction to Calculus	13-Aug-26	White Board, Marker
			Law of Parallelogram	14-Aug-26	White Board, Marker
			Integration	17-Aug-26	White Board, Marker
			Numericals of Integration	18-Aug-26	White Board, Marker
			Derivatives	19-Aug-26	White Board, Marker
			Numericals of Derivatives	20-Aug-26	White Board, Marker
			Numericals	21-Aug-26	White Board, Marker
			Numericals	22-Aug-26	White Board, Marker
3	Motion in a Plane	9	Introduction, Rectilinear Motion, Graphical Study of motion	24-Aug-26	White Board, Marker
			Equation of motion for Uniform acceleration, Average and instantaneous velocity	25-Aug-26	White Board, Marker
			Motion in 2D	26-Aug-26	White Board, Marker
			Relative Velocity	27-Aug-26	White Board, Marker
			Average and instantaneous acceleration, Relative Velocity, Projectile Motion	29-Aug-26	White Board, Marker
			Equation of motion for a projectile,	31-Aug-26	White Board, Marker
			UCM, and its expression	1-Sep-26	White Board, Marker

			Expression of Centripetal acceleration	2-Sep-26	White Board, Marker
			Conical Pendulum, Numericals	3-Sep-26	White Board, Marker
4	Laws of Motion	8	Introduction, Aristotle Fallacy, Newton's laws of motion and its importance	4-Sep-26	White Board, Marker
			Intertial and Non Inertial Frams of references, Types of force,	7-Sep-26	White Board, Marker
			Work Energy Theorem, Work done by a variable force, Principle of conservation of linear momentum	8-Sep-26	White Board, Marker
			Collisions, Coefficient of Restitution, Expression for final velocity after head on collision	9-Sep-26	White Board, Marker
			Expression for final velocity after elastic collision,	10-Sep-26	White Board, Marker
			Loss of K.E during inelastic collision	11-Sep-26	White Board, Marker
			Impulse of Force, Torque, Couple and its torque	12-Sep-26	White Board, Marker
5	Gravitation	6	Introduction, Kepler's laws,	15-Sep-26	White Board, Marker
			Universal law of Gravitation	16-Sep-26	PPT, Board,Marker
			Measurement of G, Acceleration due to gravity	17-Sep-26	PPT, Board,Marker
			Variation of g due to altitude, depth and latitude	21-Sep-26	White Board, Marker
			Gravitational Potential Enery and its Expression, Concept of Potential	22-Sep-26	White Board, Marker
			Projection of Satellites, Earth satellites, Weightlessness	23-Sep-26	White Board, Marker
			Revision for UT1	24-Sep-26	
			UT 1 FROM 26/9/26 TO 30/9/26		
			Time Period, Binding Energy of satellite	1-Oct-26	PPT, White Board,Marker
	Mechanical		Introduction, Elastic Behaviour,	5-Oct-26	PPT, White Board,Marker
			Stress and strain	6-Oct-26	PPT, White Board,Marker
			Hooke's law, Elastic Modulus	7-Oct-26	PPT, White Board,Marker

6	Properties of Solids	7	Strain Energy	8-Oct-26	White Board, Marker
			Friction in Solids	9-Oct-26	White Board, Marker
			Laws of Kinetic Friction	10-Oct-26	White Board, Marker
			Numericals	12-Oct-26	White Board, Marker
8	Sound	7	Speed of sound,	13-Oct-26	PPT, White Board, Marker
			Transverse & Longitudinal waves	14-Oct-26	PPT, White Board, Marker
			Laplace correction, Factors affecting speed of sound	15-Oct-26	White Board, Marker
			Principle of Superposition of Waves	16-Oct-26	PPT, White Board, Marker
			echo, Reverberation	19-Oct-26	PPT, White Board, Marker
			Doppler's effect, its properties	21-Oct-26	PPT, White Board, Marker
			Numericals	22-Oct-26	PPT, White Board, Marker
10	Electrostatics	8	Introduction, Basic Properties of electric charges, Quantization of charges	23-Oct-26	White Board, Marker
			Forces between charges, Coulomb's law, Definition of unit charges	24-Oct-26	White Board, Marker
			Coulomb's law in vector form, Electric Field and Electric Field intensity	26-Oct-26	White Board, Marker
			Electric lines of forces, Electric flux, Gauss Law	27-Oct-26	White Board, Marker
			Electric Dipole, Couple acting on electric dipole	28-Oct-26	PPT, White Board, Marker
			Revision for term 1	29-Oct-26	
			TERM 1 FROM 30/10/26 TO 6/11/26		
			Charge Distribution, Dipole at equator	23-Nov-26	PPT, White Board, Marker
			Charge Distribution, Numericals	25-Nov-26	White Board, Marker
			Numericals + Revision	26-Nov-26	White Board, Marker
			Introduction, Flow of current, Ohm's law- origin and its limitations	27-Nov-26	White Board, Marker

11	Electric Current through Conductors	8	Electrical energy and Power, Resistors, Rheostat	28-Nov-26	White Board, Marker
			Specific resistance and temp dependence of R	30-Nov-26	White Board, Marker
			Resistance in series and parallel	15-Dec-26	White Board, Marker
			Cells in series and parallel	1-Dec-26	White Board, Marker
			Electromotiv force, Types of cells	2-Dec-26	Bar Magnet, Iron Fillings
			Numericals	3-Dec-26	White Board, Marker
			Numericals + Revision	4-Dec-26	White Board, Marker
12	Magnetism	6	Introduction, Magnetic lines of forces, Bar magnet	7-Dec-26	PPT, White Board, Marker
			Magnetic Field due to bar magnet, Gauss's law of magnetism	8-Dec-26	White Board, Marker
			Earth's magnetism	9-Dec-26	PPT, White Board, Marker
			Magnetic maps of earth	10-Dec-26	PPT, White Board, Marker
			Numericals	11-Dec-26	PPT, White Board, Marker
			Numericals	14-Dec-26	PPT, White Board, Marker
13	Electromagnetic Waves and Communication Sytems	9	Introduction, EM Waves and their characteristics	15-Dec-26	White Board, Marker
			EM Wave and Charch., Wave representation	16-Dec-26	White Board, Marker
			Revision	17-Dec-26	White Board, Marker
			Electromagnetic Spectrum	18-Dec-26	White Board, Marker
			Radio Wave, X Ray, UV ray, Micro wave	19-Dec-26	White Board, Marker
			Electromagnetic Spectrum and Communiaction system	21-Dec-26	White Board, Marker
			Wave Propagation and its types, Modulation	22-Dec-26	White Board, Marker
			Numericals	23-Dec-26	White Board, Marker
			Numericals + Revision	24-Dec-26	White Board, Marker
			UT 2 REVISION		

			UT2 FROM 28/12/26 TO 31/12/26		
14	Semiconductor	7	Introduction, Electrical conduction in solids, Band theory	1/Jan/27	White Board, Marker
			Intrinsic and extrinsic semicon.	4/Jan/27	White Board, Marker
			P type and n type semiconductor	5/Jan/27	White Board, Marker
			Doping, Impurity, pentavalent and trivalent impurity	6/Jan/27	White Board, Marker
			p-n junction - forward and reversed biased	7/Jan/27	White Board, Marker
			Depletion region and its features	8/Jan/27	White Board, Marker
			Working of pn junction diode forward and reversed biased	11/Jan/27	PPT, White Board, Marker
			Applications of pn junction diode	12/Jan/27	PPT, White Board, Marker
			Static and dynamic resistance	13/Jan/27	PPT, White Board, Marker
7	Thermal Properties of Matter	13	Introduction, Temp and Heat	14/Jan/27	PPT, White Board, Marker
			Absolute Temp and Ideal Gas equation	15/Jan/27	PPT, White Board, Marker
			Molar Specific Heat	18/Jan/27	PPT, White Board, Marker
			Thermal Expansion	19/Jan/27	PPT, White Board, Marker
			Specific Heat of Solid and liquid	20/Jan/27	PPT, White Board, Marker
			Areal Expansion	21/Jan/27	PPT, White Board, Marker
			Thermal expansion	22/Jan/27	PPT, White Board, Marker
			Newtons law of cooling	23/Jan/27	PPT, White Board, Marker
			Conduction, Convection and radiation	25/Jan/27	PPT, White Board, Marker
			Application of Convection	27/Jan/27	PPT, White Board, Marker
			Sublimation Vaporization and latent heat	28/Jan/27	PPT, White Board, Marker
			Colorimetry, change of state	29/Jan/27	PPT, White Board, Marker
			Numericals	30/Jan/27	PPT, White Board, Marker

9	Optics	14	Introiduction, Nature of light, Ray optics	1/Feb/27	PPT, White Board,Marker
			Reflection from curved surface,	2/Feb/27	PPT, White Board,Marker
			Reflection from curved surface,	3/Feb/27	PPT, White Board,Marker
			Rerefraction, Total Internal Reflection	4/Feb/27	PPT, White Board,Marker
			Applications of total internal reflection,	5/Feb/27	PPT, White Board,Marker
			Refraction at a spherical surface and lenses	8/Feb/27	PPT, White Board,Marker
			Lens Maker's Formula, Dispersion	9/Feb/27	PPT, White Board,Marker
			Defects of lenses,	10/Feb/27	PPT, White Board,Marker
			Optical Instruments	11/Feb/27	PPT, White Board,Marker
			Compound Microscope	12/Feb/27	PPT, White Board,Marker
			Sphereical abbreation,	13/Feb/27	PPT, White Board,Marker
			Magnifying Power	15/Feb/27	PPT, White Board,Marker
			Numericals	16/Feb/27	PPT, White Board,Marker
			Numericals	17/Feb/27	PPT, White Board,Marker
			Whole Syllabus reveision	FROM 18-02-2027 TO 10-3-26	PPT, White Board,Marker
			Term 02 Begins	10 March to 17 March 2027	

**Physics Department
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