

**Bhartiya Vidya Mandir Sen. Sec. School, Sector 39, Chandigarh Road, Ludhiana**

**CLASS - XI Stream-Science Subject: Physics Session 2024-2025**

**Books :NCERT**

Month	Unit/Chapter/Topic	Learning Objectives	Resources/Art-Integrated/Pedagogy Tools Used/E-Resources		Learning Outcomes/Skills Learnt by Students
APRIL	<b>Ch-2 : Units and measurement</b>	The objective of this chapter is to make the learners to know about different types of measurement system of units and significance & application of dimensional analysis.	Demonstration cum lecture method	<a href="https://diksha.gov.in/play/collection/do_3131034752886128641978?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_313087942744276992119">https://diksha.gov.in/play/collection/do_3131034752886128641978?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_313087942744276992119</a>	Application and analysis
	<b>Ch-3: Motion in a straight line</b>	The Objective of this chapter is to clear the concept of motion of a body with relating it to real life examples and to have basic concept of calculus method to derive three basic equations of kinematics. Also the learners will know about the graphical treatment of different types of motion.	Guided discussion	<a href="https://diksha.gov.in/play/collection/do_3131034752886128641978?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_3130908402736087041451">https://diksha.gov.in/play/collection/do_3131034752886128641978?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_3130908402736087041451</a>	Collaborating learning, critical thinking

MAY	Ch-4: Motion in a plane	The Objective of this chapter is to clear the concept of Vector analysis of a physical quantities and to understand the concept of vector algebra (addition subtraction) and projectile motion of body.	Demonstration cum lecture method	<a href="https://diksha.gov.in/play/collectio n/do_3131034752886128641978?r eferer=utm_source%3Dmobile%2 6utm_campaign%3Dshare_content &amp;contentId=do_313092892328419 3281816">https://diksha.gov.in/play/collectio n/do_3131034752886128641978?r eferer=utm_source%3Dmobile%2 6utm_campaign%3Dshare_content &amp;contentId=do_313092892328419 3281816</a>	Problem solving
JULY	Ch-5: Laws of Motion	The objective of this chapter is to make learners familiar about Newton's laws of motion and its various applications, concurrent forces, friction and its various types, friction is a necessary evil, banking of roads with and without friction	Demonstration cum lecture method	<a href="https://diksha.gov.in/play/collectio n/do_3131034752886128641978?r eferer=utm_source%3Dmobile%2 6utm_campaign%3Dshare_content &amp;contentId=do_313095709087801 3441121">https://diksha.gov.in/play/collectio n/do_3131034752886128641978?r eferer=utm_source%3Dmobile%2 6utm_campaign%3Dshare_content &amp;contentId=do_313095709087801 3441121</a>	Understanding, Problem solving
AUGUST	Ch-6: Work, Energy and Power	The Objective of this chapter is to clear the concept Work, Energy and Power and its application in our daily life which helps us to approach and to solve the Problem technically.	Guided discussion, Problem solving based learning	<a href="https://diksha.gov.in/play/collectio n/do_3131034752886128641978?r eferer=utm_source%3Dmobile%2 6utm_campaign%3Dshare_content &amp;contentId=do_313107759451963 39213">https://diksha.gov.in/play/collectio n/do_3131034752886128641978?r eferer=utm_source%3Dmobile%2 6utm_campaign%3Dshare_content &amp;contentId=do_313107759451963 39213</a>	Application and analysis

OCTOBER	<b>Ch-7: System of particles and Rotational Motion</b>	The Objective of this chapter is to clear the concept of rotational dynamics, concept different parameters of rotating body (Torque, Angular momentum, moment of inertia) and applying different theorems to find the moment of inertia of simple geometrical.	Demonstration cum lecture method	<a href="https://diksha.gov.in/play/collectio n/do_3131034752886128641978?r eferer=utm_source%3Dmobile%2 6utm_campaign%3Dshare_content &amp;contentId=do_313103578170564 60811407">https://diksha.gov.in/play/collectio n/do_3131034752886128641978?r eferer=utm_source%3Dmobile%2 6utm_campaign%3Dshare_content &amp;contentId=do_313103578170564 60811407</a>	Collaborating learning, critical thinking
	<b>Ch-8: Gravitation</b>	The objective of this chapter is to clear the gravitational force, gravitational potential energy, kepler's law of planetary motion, escape velocity, orbital velocity and its relation, geostationary satellite.	Activity based teaching	<a href="https://diksha.gov.in/play/collectio n/do_3131034752886128641978?r eferer=utm_source%3Dmobile%2 6utm_campaign%3Dshare_content &amp;contentId=do_313103550091476 99211429">https://diksha.gov.in/play/collectio n/do_3131034752886128641978?r eferer=utm_source%3Dmobile%2 6utm_campaign%3Dshare_content &amp;contentId=do_313103550091476 99211429</a>	Understanding, Peer-group learning
NOVEMBER	<b>Ch-9: Mechanical Properties of solids</b>	The objective of this chapter is to make the learners to understand the concept of elasticity and rigidity of a body with stress /strain analysis and applying it to solve real life problems.	Lecture method	<a href="https://diksha.gov.in/play/collectio n/do_31310347529044787211310 ?referrer=utm_source%3Dmobile %26utm_campaign%3Dshare_cont ent&amp;contentId=do_313128320718 73331213">https://diksha.gov.in/play/collectio n/do_31310347529044787211310 ?referrer=utm_source%3Dmobile %26utm_campaign%3Dshare_cont ent&amp;contentId=do_313128320718 73331213</a>	Understanding

	<b>Ch-10: Mechanical Properties of Fluids</b>	To make the learners to understand the concept of fluid dynamics and its application for our daily life.	Lecture method	<a href="https://diksha.gov.in/play/collection/do_31310347529044787211310?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_31310779146491494413614">https://diksha.gov.in/play/collection/do_31310347529044787211310?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_31310779146491494413614</a>	Application and analysis
DECEMBER	<b>Ch-11: Thermal Properties of Matter</b>	To make the learners to understand the concept of heat transfer between the bodies and its different methods along with its mathematical analysis.	Guided discussion	<a href="https://diksha.gov.in/play/collection/do_31310347529044787211310?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_31310779986021580813279">https://diksha.gov.in/play/collection/do_31310347529044787211310?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_31310779986021580813279</a>	Understanding
	<b>Ch-12: Thermodynamics</b>	The objective of this chapter is to make learners familiar about thermodynamic systems, ideal gas equation, PV diagrams, work done in isothermal, adiabatic process, specific heat at constant volume and pressure, relation between Cp-Cv	Activity based teaching	<a href="https://diksha.gov.in/play/collection/do_31310347529044787211310?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_3131283045038571521218">https://diksha.gov.in/play/collection/do_31310347529044787211310?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_3131283045038571521218</a>	Collaborating learning, critical thinking
	<b>Ch-13: Kinetic Theory Of Gases</b>	The objective of this chapter is to inculcate knowledge of assumptions of kinetic theory, pressure exerted, degree of freedom and its value for specific heat, mean free path, equipartition energy	Problem Solving based learning	<a href="https://diksha.gov.in/play/collection/do_31310347529044787211310?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_3131283103507988481982">https://diksha.gov.in/play/collection/do_31310347529044787211310?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_3131283103507988481982</a>	Problem solving

JANUARY	<b>Ch-14 : Oscillations</b>	To make the learners to understand the concept of wave motion and SHM along its diferent applications and mathematical analysis.	Demonstration cum lecture method	<a href="https://diksha.gov.in/play/collection/do_31310347529044787211310?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_31310355960809062411448">https://diksha.gov.in/play/collection/do_31310347529044787211310?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_31310355960809062411448</a>	Collaborating learning,critical thinking
	<b>Ch-15: Waves</b>	To make the learners to understand the concept of wave motion , beats relating it to our daily life.	Peerteaching and Guided Discussion	<a href="https://diksha.gov.in/play/collection/do_31310347529044787211310?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_31310349660392652811007">https://diksha.gov.in/play/collection/do_31310347529044787211310?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&amp;contentId=do_31310349660392652811007</a>	Understanding and Collaborating learning