

**D.A.V. Public School**  
**Sector – 3 Dhurwa Ranchi – 4**

**Class X**

**Physics Syllabus(2019-2020)**

Prescribed Books:

- **Physics For Class X (NCERT)**
- **Physics For Class X (Lakhmir Singh and Manjit Singh)**

Months	Unit / Chapters	Sub Topics	Exam / Tests Portion
April	Ch -1 (Electricity)	Electric current, potential difference and electric current. Ohm's law; Resistance, Resistivity, Factors on which the resistance of a conductor depends. Series combination of resistors, parallel combination of resistors and its applications in daily life.	
May	Ch -1 (Electricity)	Heating effect of electric current and its applications in daily life. Electric power, Interrelation between P, V, I and R. NCERT ( In text and exercise Problem).	
		Monthly Test - Chapter 1 ( 17 Marks)	
June	Ch-3 (Sources of Energy)	<b>Sources of energy:</b> Different forms of energy, conventional and non-conventional sources of energy: Fossil fuels, solar energy; biogas; wind, water and tidal energy; Nuclear energy. Renewable versus non-renewable sources of Energy	<b><u>PT I Portion</u></b>
July	Ch – 2 (Magnetic effect of electric current)	Magnetic field, field lines, field due to a current carrying conductor, field due to current carrying coil or solenoid; Force on current carrying conductor, Fleming's Left Hand Rule, Electric Motor, Electromagnetic induction	<b><u>Half Yearly Exam Portion</u></b>
		Monthly Test - Chapter 3 ( 17 Marks)	
August	Ch – 2 (Magnetic effect of electric current)	Induced potential difference, Induced current. Fleming's Right Hand Rule, Electric Generator, Direct current. Alternating current: frequency of AC. Advantage of AC	

		over DC. Domestic electric circuits.NCERT(In text and exercise Problem) <b>Revision for Half Yearly Exam</b>	
		Monthly Test - Chapter 2 ( 17 Marks)	
September	REVISION	<b><u>Half Yearly Exam</u></b>	
October	Ch – 4 (Reflection of light)  Ch – 5 (Refraction of light)	Reflection of light by curved surfaces; Images formed by spherical mirrors, centre of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not required), magnification.  <b>Refraction; Laws of refraction, refractive index.</b> Refraction of light by spherical lens; Image formed by spherical lenses; Lens formula (Derivation not required); Magnification. Power of a lens.  <b>Revision for PT II</b>	<b><u>PT II Portion</u></b>
		Monthly Test - Chapter 4,5 ( 17 Marks)	
November	Ch – 6 (The Human eye and Colourful World)	Functioning of a lens in human eye, defects of vision and their corrections, applications of spherical mirrors and lenses. Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life.	<b>Pre Board / Mock I / II Whole Syllabus</b>
		Monthly Test - Chapter 6 ( 17 Marks)	
December		<b>Revision for Pre Board I &amp; II, Board</b>	<b><u>PT III Portion</u></b>

## Monthly Test

Chapter	Chapter Name	- Month	Marks
1	Electricity	- May	17
2	Magnetic effect of electric current	- July	17
3	Sources of Energy	- Aug	17
4	Light(Reflection and refraction)	- Oct	17