

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

Class X

Physics Syllabus(2020-2021)

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)	Sources of energy: 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	<u>PT I Portion</u>
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	<u>Half Yearly Exam Portion</u>
		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) Revision for Half Yearly Exam	
		Monthly Test - Chapter 2 (17 Marks)	
September	REVISION	<u>Half Yearly Exam</u>	
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. Refraction; Laws of refraction, refractive index. Refraction of light by spherical lens; Image formed by spherical lenses; Lens formula (Derivation not required); Magnification. Power of a lens. Revision for PT II	<u>PT II Portion</u>
		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.	Pre Board / Mock I / II Whole Syllabus
		Monthly Test - Chapter 6 (17 Marks)	
December		Revision for Pre Board I & II, Board	<u>PT III Portion</u>

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