NEW ERA SENIOR SECONDARY SCHOOL NIZAMPURA, VADODARA

Yearly Syllabus planning

Class X Physics

MONTH	NO. OF DAYS	Chapter	Content
April May	23+2	**Light; Reflection and refraction**	Laws of reflection, regular and irregular reflection, spherical mirrors, terms related to spherical mirrors, sign convention for spherical mirrors, image formation by spherical mirrors, numerical on mirror formula and linear magnification, uses of spherical mirrors.
June	19	**Light; Reflection and refraction**	Refraction of light, concept of absolute refractive index and relative refractive index,
July	26	**Light; Reflection and refraction**	Snell's law, refraction through a glass slab, lateral displacement, spherical lenses, image formation by spherical lenses, sign convention for lenses, lens formula and numerical.
August	23	**The human eye and the colourful world**	Structure of human eye, power of accommodation, defects of vision; myopia, hypermetropia and presbyopia, correction of the defects of vision, refraction through prism, dispersion of light, atmospheric refraction, scattering of light, tyndal effect
Sept.	23	**Electricity**	Concept of static electricity, electric charges and their properties, Concept of electric current, define ampere and coulomb, concept of electric potential and electric potential difference, define the unit of electric potential and ele. p.d. i.e. volt, Ohm's law, concept of resistance and resistivity, factors affecting resistance. Numerical on resistivity. **Revision for term-1**

MONTH	NO. OF DAYS	Chapter	Content
Oct.	23	**Electricity**	Combination of resistors, series and parallel connections, numerical on calculating resultant resistance when resistors are connected in different circuits.
Nov.	11	**Magnetic effect of electric current**	Magnetic field and field lines, Oersted's experiment. Relation between electricity and magnetism, magnetic field due to a current carrying straight conductor, a circular loop and a circular coil, right hand thumb rule to determine the direction of magnetic field lines, magnetic field lines due to a current carrying solenoid, concept of uniform magnetic field, force acting on a current carrying conductor in magnetic field,(The kicking exp.) Fleming's left hand rule to determine the direction of force on the conductor,
Dec.	23	**Magnetic effect of electric current**	Relation between electricity and magnetism, magnetic field due to a current carrying straight conductor, a circular loop and a circular coil, right hand thumb rule to determine the direction of magnetic field lines, magnetic field lines due to a current carrying solenoid, concept of uniform magnetic field,
Jan	22	**Magnetic effect of electric current**	Force acting on a current carrying conductor in magnetic field,(The kicking exp.) Fleming's left hand rule to determine the direction of force on the conductor.
Feb	23	**Revision for SA 2**	**Revision for pre-board**