**SCIENCE PAPER: PHYSICS SYLLABUS**

**CLASS X**

**Session 2018-2019**

**Chapter 1: Electricity**

Electric current, p.d.; Ohm’s law, Resistance, Factors on which the resistance depends, series and parallel combination of resistor and its application in our daily life, heating effect of electric current and its application, electric power, inter-relation between p.d., p, I and R.

**Chapter 2: Magnetic effects and Electric Current**

Magnetic field, Magnetic field lines, magnetic field lines due to current carrying coil, solenoid. Force on current carrying condition, Fleming left hand rule, electromagnetic induction, Induced p.d., induced current, Fleming right hand rule, direct current, alternate current, frequency of AC, advantage of Ac over DC, domestic circuit.

**Chapter 3: Source of energy**

Different terms of energy, conventional and non-conventional source of energy , fossil fuel, solar energy, wind, water and tidal energy, Biogas, Nuclear energy, renewable and non-renewable source of energy.

**Chapter 4: Light**

Reflection of light, laws of reflection, image and their kinds, image formed by spherical mirror, centre of curvature, principal axis, principal focus, focal length, mirror formulae, magnification, application of spherical mirror, refraction, law of refraction, refractive index, refraction of light by spherical lenses, image formed by spherical lenses, lens formulae, magnification, power of lens.

**Chapter 5: Human eye and colourful world**

Human eye and its functioning, Problem of vision and remedies, refraction of light through prism, dispersion of light, scattering of light, application in daily life.

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|  | **CHAPTERS** |
| **PERIODIC TEST I (JULY 2018)** | Chapter 1: Electricity  Chapter 2: Source of Energy |
| **PERIODIC TEST II (SEPTEMBER 2018)** | Chapter 1: Electricity  Chapter 2: Source of Energy  Chapter 3: Magnetic effect of electric current  Chapter 4: Light |
| **PERIODIC TEST III (JANUARY 2019)** | Chapter 1: Electricity  Chapter 2: Source of Energy  Chapter 3: Magnetic effect of electric current  Chapter 4: Light  Chapter 5: Human eye and colourful world |
| **PRE-BOARD EXAMIATION (FEBRUARY 2019)** | Chapter 1: Electricity  Chapter 2: Source of Energy  Chapter 3: Magnetic effect of electric current  Chapter 4: Light  Chapter 5: Human eye and colourful world |
| **BOARD EXAMINATION (MARCH 2019)** | Chapter 1: Electricity  Chapter 2: Source of Energy  Chapter 3: Magnetic effect of electric current  Chapter 4: Light  Chapter 5: Human eye and colourful world |

**PRACTICALS:**

Major practical experiments as prescribed by the CBSE board syllabus (Physics).