

**MONTHLY SYLLABUS**

**SESSION-2016-17**

**CLASS-X**

**SUBJECT : SCIENCE**

<b>MONTH</b>	<b>CONTENTS</b>
April 2016	<p><b>Chapter 1 : Chemical Reactions &amp; Equations</b></p> <p>Writing chemical equations and its importance, balancing of chemical equations.</p> <p>Activity: Burning of Mg Ribbon, observe the rusting of Fe.</p> <p>Types of Chemical Reactions.</p> <p>Practical-3, FA-1 – 1<sup>st</sup> Activity</p> <p><b>Chapter 2 : Acids, Bases &amp; Salts</b></p> <p>Definitions, properties of acids and bases, reactions</p> <p>Activity: 2.1, 2.2, 2.5, 2.15</p> <p>Practical-2</p> <p>What is pH? Concept and importance of pH scale</p> <p>Practical3, FA-1 – 2<sup>nd</sup> Activity</p> <p>Preparation and uses of Washing Soda &amp; POP.</p> <p><b>Chapter 4 : Sources of Energy</b></p> <p>Different forms of energy, conventional sources of energy, non-conventional sources of energy, fossil fuels.</p> <p>Renewable Sources.</p> <p>FA-1 (3<sup>rd</sup> Activity)</p>
May 2016	Comparative study of renewable nuclear power and non-renewable sources of energy

	<p>Renewable and non-renewable sources of energy.</p> <p><b>Chapter 3 : Metals and Non-Metals</b></p> <p>Physical, chemical properties</p> <p>FA-3 (4<sup>th</sup> Activity)</p>
11.05.2016 to 30.06.2016	<p><b>SUMMER VACATION</b></p> <p><b>PROJECT WORK</b></p>
July 2016	<p><b>Chapter 6 : Life Processes</b></p> <p>Living being – nutrition in plant and human being</p> <p>Practical-4</p> <p>FA-2 (1<sup>st</sup> Activity)</p> <p>Respiration, Transportation, Excretion</p> <p>FA-2 (2<sup>nd</sup> Activity)</p> <p>Excretion (in human beings)</p> <p><b>Chapter 7 : Control and Coordination</b></p> <p>Practical 5,6,7</p> <p>Nervous system in animals, structure and function of neuron.</p> <p>Voluntary and involuntary actions, reflex arc, reflex action.</p> <p>Human brain – different parts and their function.</p> <p>Coordination in plants.</p> <p>Function of different hormones.</p>
August 2016	<p>FA-2 (3<sup>rd</sup> Activity)</p> <p><b>Chapter 12 : Electricity</b></p> <p>Electric current, potential difference, ohm's law, resistance, resistivity, factors on which resistance of a conductor depends.</p>

	<p>Practical-8</p> <p>Series and parallel combination of resistors, heating effect.</p> <p>Practical 9,10</p> <p><b>Chapter 13 : Magnetic effect of electric current</b></p> <p>Magnetic field, right hand thumb rule, Fleming’s left hand rule</p> <p>FA-2 (4<sup>th</sup> Activity)</p> <p>Electromagnetic induction, Fleming’s Right hand rule.</p>
September 2016	<p>D.C., A.C., Domestic electric circuit</p> <p>Practice of questions for PSA exam.</p> <p>Revision of Chapter 1,2,3,14</p> <p>SA-I Examination (22.09.2016 to 09.10.2016)</p>
October 2016	<p><b>Chapter-4 : Carbon and its compounds</b></p> <p>Unique properties of carbon, bonding in carbon compounds, covalent bonds.</p> <p>Versatile nature of carbon, homologous series.</p>
19.10.2016 to 22.10.2016	<p style="text-align: center;"><b>AUTUMN BREAK</b></p> <p>Nomenclature, chain, branches.</p> <p>Saturated and unsaturated hydrocarbons.</p> <p>Chemical properties, ethanol, ethanoic acid</p> <p>Practical No.1</p>
November 2016	<p>Soap, Detergent</p> <p><b>Chapter 15: Our environment</b></p> <p>Ecosystem and its components, environmental problems, food chain, food web, ozone layer depletion.</p>

	<p>Practical 2,3</p> <p>FA-3 I Activity</p> <p>Biodegradable, non-biodegradable substances</p> <p>Garbage Management</p> <p><b>Chapter-5 : Periodic Classification of elements</b></p> <p>Need for importance, classification (Doberneir, Newlands, Mendeleev)</p> <p>Modern Periodic Table Structure and Classification, Graduation in Properties of elements</p> <p>FA-3 (II Activity)</p> <p><b>Chapter-8 : How do organisms reproduce</b></p> <p>Sexual and Asexual reproduction in animals and plants.</p> <p>Reproductive health.</p> <p>Practical-2</p>
December 2016	<p>HIV-AIDS, conception and female health.</p> <p><b>Chapter-9 : Heredity and Evolution</b></p> <p>Heredity, inherited traits, Mendel's law.</p> <p>Practical-3, FA-3 – 3<sup>rd</sup> Activity.</p> <p>Basic concept evolution, fossils, analogous and homologous organs.</p> <p><b>Chapter 16 : Management of Natural Resources</b></p> <p>Forest and Wildlife, Need to manage resources, stake holders, sustainable development</p> <p>Practical-4</p> <p>Coal and Petroleum, Dams, Water Managements and Rain Water Harvesting</p>

	<p>FA-3 : 4<sup>th</sup> Activity</p> <p><b>Chapter-10 : Light Reflection and Refraction</b></p> <p>Laws, spherical mirrors</p>
31.12.2016 to 15.01.2017	<p><b>WINTER BREAK</b></p> <p><b>(PROJECT WORK)</b></p>
January 2017	<p>Spherical mirror – image formation, representation of images with the help of ray diagram.</p> <p>uses of concave and convex mirror, practical-5, FA4 (I Activity)</p> <p>Spherical lens – image formation, sign convention, lens formula, uses of concave, convex lens.</p> <p>FA-4 (II Activity), Practical-6.</p>
February 2017	<p><b>Chapter-11 : Human Eye and Colourful World</b></p> <p>Human eye, accommodation power of eye, prism, refraction, dispersion</p> <p>FA-4 (III Activity) Practical-7</p> <p>Atmospheric refraction, scattering of light, Tyndall effect</p> <p>Practical-8</p> <p>FA4 (4<sup>th</sup> Activity), Revision 10,11</p>
	<p><b>Revision Chapter 4, 5, 8, 9, 15, 16</b></p> <p><b>SA-2 Examination (19.2.2017 to 24.03.2017)</b></p>