

# Syllabus for ALOHA GAT 2018

Class : 7<sup>th</sup>

Subject : Science

Physics		
S. No.	Unit	Topics to be covered
01	Motion & Time	<ul style="list-style-type: none"><li>• Understanding of motion and rest.</li><li>• Motion and its types,</li><li>• Measurement of speed and time and its SI units.</li><li>• Distance– time graph</li></ul>
02	Electric Current and its effects	<ul style="list-style-type: none"><li>• Electric current.</li><li>• Electric circuit</li><li>• Heating and magnetic effects of current.</li><li>• Electric fuse and its principles.</li><li>• Electric bell and its working.</li></ul>
Chemistry		
01	Acid Base & Salts	<ul style="list-style-type: none"><li>• Acids, bases and salts.</li><li>• Acid base indicators</li><li>• General physical properties of acid and bases with examples Neutralization( brief idea)</li></ul>
02	Physical & Chemical Changes	<ul style="list-style-type: none"><li>• Concept of physical and chemical change and their types viz, Galvanization, Rusting of iron and crystallization.</li></ul>
Biology		
01	Respiration in organisms	<ul style="list-style-type: none"><li>• Respiration</li><li>• Types and process of respiration</li><li>• Respiration&amp; breathing (Differences).</li><li>• Respiratory system in human being.</li><li>• Role of Diaphragm, chest, lungs and ribs in breathing. Composition of inhale and exhale air.</li><li>• Exchange of gases in plants through stomata..</li></ul>
02	Reproduction in plants	<ul style="list-style-type: none"><li>• Reproduction and its need.</li><li>• Main modes of reproduction in plants.</li><li>• Different methods of asexual reproduction.</li><li>• Vegetative propagation and its advantages.</li><li>• Sexual reproduction in plants (Brief)</li><li>• Sexual parts in flower.</li><li>• Pollination and fertilization.</li><li>• Parts of typical seed (Gram Seed)</li><li>• Parts of typical fruit (Pea and mango)</li></ul>

## Subject : Mathematics

S. No.	Unit	Topics to be covered
01	Exponents & Powers	<ul style="list-style-type: none"> <li>Understanding of exponents and laws of exponents.</li> <li>Expressing large numbers in the standard form.</li> </ul>
02	Algebraic Expressions	<ul style="list-style-type: none"> <li>Formation of algebraic expressions from different situations.</li> <li>Addition and subtraction of algebraic expressions.</li> </ul>
03	Fractions & Decimals	<ul style="list-style-type: none"> <li>Concept of fractions by solid operations.</li> <li>Concept of fractions as decimals</li> <li>Operate fraction &amp; fraction, fractions &amp; integers.</li> <li>Perform operations on decimals.</li> <li>Compare decimals and fractions.</li> </ul>
04	Congruence of Triangles	<ul style="list-style-type: none"> <li>Conceptual understanding of congruency in plane figures, line segments, angles and triangles.</li> <li>Criteria for congruence of triangles (SSS, SAS, ASA, RHS).</li> <li>Knowledge of importance of congruency.</li> </ul>
05	Simple Equations	<ul style="list-style-type: none"> <li>Concept and understanding of equations.</li> <li>Ability to frame linear equations from statements and their solutions.</li> <li>Apply simple equation in day to day life.</li> </ul>
06	Perimeter & Area	<ul style="list-style-type: none"> <li>Understanding of perimeter and be able to calculate the perimeter of different figures</li> </ul>

## Subject : Social Studies

History		
S. No.	Unit	Topics to be covered
01	The Mughal Empire	<ul style="list-style-type: none"> <li>Political history of 16th &amp; 17th centuries-Impact of imperial administration at the local/Regional level-Akbarnama &amp; Ain-i-Akbar as a source.</li> </ul>
02	Eighteen Century Political Reforms	<ul style="list-style-type: none"> <li>Developments related to the Sikhs, Marathas, Rajputs, Later Mughals- Nawabs of Awadh, Bengal &amp; Nizam of Hyderabad.</li> </ul>
03	Rulers & Bindings (Monumental Architecture)	<ul style="list-style-type: none"> <li>Range of materials, Skills and Styles used for buildings-Engineering &amp; Construction skills, artisan organization &amp; resources required for building works-use of contemporary documents, inscriptions &amp; the buildings to rewrite history.</li> </ul>
Civics		
01	State Govt. / Govt in the State	<ul style="list-style-type: none"> <li>Composition of state Legislative</li> <li>Chief minister &amp; his /her council of ministers- Their powers-</li> <li>Governor – his appointment &amp; powers</li> <li>Administration in union Territories.</li> </ul>
02	Media & Democracy/ Understanding the media.	<ul style="list-style-type: none"> <li>Concept of direct &amp; In- direct Democracy</li> <li>Need of Indirect democracy in India</li> </ul>

		<ul style="list-style-type: none"> <li>• Role of Media in Democracy</li> <li>• Objectives of Media</li> <li>• Limitations of Media</li> <li>• Basic Principals of journalism.</li> </ul>
<b>Geography</b>		
<b>01</b>	<b>Inside Our Earth/ Earth's interior</b>	<ul style="list-style-type: none"> <li>• Surface of the earth , Interior layers of the earth,</li> <li>• Rocks &amp; Minerals- Categories of rocks—Rock cycle.</li> </ul>
<b>02</b>	<b>Natural Vegetation&amp; Wild life</b>	<ul style="list-style-type: none"> <li>• Factors responsible for growth of vegetation.</li> <li>• Classification of natural vegetation.</li> <li>• Types of forests, Grasslands &amp; Deserts.</li> </ul>