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| **Indian School Al Wadi Al Kabir - Syllabus break up for 2018-19**  **Chemistry** | | | | | |
| Class 11  chemistry | Week1 | Week2 | Week3 (14-15) | Week4(18-22) | Week5(25-29) |
| **APRIL**  **(2- 30)** | **(2 – 5)** | **(8-12)** | **(15-19)**  **Some Basic Concepts of Chemistry**:  General Introduction: Importance and scope of chemistry.  Nature of matter, laws of chemical combination  Dalton's atomic theory:  Atomic and molecular masses, mole concept and molar mass. | **(22-26)**  .  Percentage composition, empirical and molecular formula  Stoichiometry and calculations based on stoichiometry.  **Structure of Atom**  Bohr's model and its limitations  , | **(29-30)**  Concept of shells and subshells, dual nature of matter and light  de Broglie's relationship,  Heisenberg uncertainty principle |
| PRACTICAL:  Introduction to lab procedure, Salt Analysis 1 | | | | | |
| **MAY (01 – 31)** | **(1-3)**  Concept of orbitals, quantum numbers, shapes of s, p and d orbitals  Aufbau principle, Pauli's exclusion principle and Hund's rule  Electronic configuration of atoms, stability of half-filled and completely filled orbitals. | **(6-10)**  **Classification of Elements and Periodicity in Properties**  Significance of classification, brief history of the development of periodic table, modern periodic  Valency  Nomenclature of elements with atomic number greater than 100.  Periodic trends in properties of elements –atomic radii.  Ionic radii, inert gas radii Ionization enthalpy, electron gain enthalpy, electronegativity. | **(13-17)**  **Chemical Bonding and Molecular structure**  Valence electrons, ionic bond, covalent bond; bond parameters, Lewis structure  Polar character of covalent bond, covalent character of ionic bond, valence bond theory, resonance, geometry of covalent molecules  **UNIT TEST 1** | **(20-24)**  Concept of hybridization, involving s, p and d orbitals  Shapes of some simple molecules, molecular orbital theory of homonuclear diatomic molecules, hydrogen bond.  **Environmental chemistry – project**    **UNIT TEST 1** | **(27-31)**  Bond order  Magnetism and stability of molecules  **UNIT TEST 1** |
| **PRACTICAL: Salt Analysis 2 /** Salt Analysis 3 | | | | | |
| **SUMMER BREAK (From 03.06.18 to 31.07.18)** | | | | | |