## Indian School Al Wadi Al Kabir - Syllabus break up for OCTOBER 20 19-20 CLASS XI-SCIENCE

| SUBJECT | WEEK 1 | WEEK 2 | WEEK 3 | WEEK 4 | WEEK 5 |
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| ENGLISH | The Browning Version NOTE MAKING | Albert Einstein at School <br> Grammar-Error <br> Correction <br> PRACTICE <br> WORKSHEET | Grammar-Clauses <br> Formal Letter- Official: School/ College Authorities | NOTE MAKING <br> Advertisements <br> NOTICE <br> WRITING <br> ASL | Mother's Day <br> Comprehension <br> Passage <br> ASL |
| PHYSICS | Moment of inertia, radius of gyration, values of moments of inertia for simple geometrical objects (no <br> Derivation <br> Statement of parallel and perpendicular axes theorems and their applications. <br> Statement of parallel and perpendicular axes theorems and their applications. | GRAVITATION- <br> Kepler's laws of planetary motion, universal law of gravitation. <br> Acceleration due to gravity and its variation with altitude and depth. Gravitational potential energy and gravitational potential, | Escape velocity, orbital velocity of a satellite. <br> Geo-stationary satellites. <br> PROPERTIES OF BULK MATTER <br> Elastic behaviour, Stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear modulus <br> of rigidity, Poisson's ratio; elastic energy. | Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes), effect of gravity on fluid pressure. Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, critical velocity,, | Properties of Bulk Matter <br> Bernoulli'stheorem and its applications. Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, <br> Applicationof surface tension ideas to drops, bubbles and capillary rise. |


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| PHYSICS <br> (PRACTICALS) | Cycle II <br> Screw Gauge II <br> Vernier Callipers II <br> Parallelogram law |  |  |  |  |
| CHEMISTRY | Internal energy and enthalpy, Heat capacity and specific heat. (CONTD./) | Extensive and intensive properties, Hess's law, Enthalpy of bond dissociation, Combustion, Formation, Atomization, Sublimation Second law of Thermodynamics, Gibb's energy change for spontaneous and non-spontaneous processes, Criteria for equilibrium. | Supplementary material <br> Third law of Thermodynamics <br> EQUILIBRIUM <br> - Dynamic equilibrium, Law of mass action, <br> Equilibrium constant, Factors affecting equilibrium <br> Ionic Equilibrium in solution,Acids,Bases | Lowry Bronsted <br> concept of Acids <br> and bases. Lewis <br> Acids and bases <br> Ionisation of acids <br> and bases <br> Ionization of <br> polybasic acids, <br> Acid strength <br> Concept of <br> pH,Hydrolysis of <br> salts ,Buffer <br> solution, <br> Henderson <br> equation | REDOX REACTIONS <br> Concept of oxidation and reduction, Redox reactions. <br> balancing redox reactions in terms of loss and gain of electrons. <br> Redox reactions as the basis for titrations <br> Applications of redox reactions <br> Daniell cell |


|  |  |  | and salts, Arrhenius concept, | Solubility equilibria <br> Common ion effect on solubility of salts | Standard electrode potential |
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| CHEMISTRY <br> (PRACTICALS) | Analysis of Salt VIII VOLUMETRIC ANALYSIS -I |  |  |  |  |
| MATHEMATICS | Binomial Theorem | Sequences and Series | Sequences and Series | Straight lines | Straight lines |
| MATHEMATICS (PRACTICALS) | Complex Numbers and Quadratic Equations - Activity 11 <br> To interpret geometrically the meaning of $\mathrm{i}=\sqrt{ }(-1)$ and its integral powers. <br> Binomial Theorem - Activity 15 <br> To construct a Pascal's Triangle and to write binomial expansion for a given positive integral exponent Sequence And Series Activity - 17 <br> An alternative approach to obtain formula for the sum of squares of first n natural numbers. |  |  |  |  |


| BIOLOGY | Respiration glycolysis | Respiration <br> Plant growth and regulators - Plant growth regulators | Plant growth and regulators | Cell the unit of life Living world | Biological classification |
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| BIOLOGY <br> (PRACTICALS) | Mitosis - P.S <br> Animal specimens |  |  |  |  |
| INFORMATICS | Introduction to python dictionary. Methods to create , accessing an element, traversing, appending values, updating elements, removing an item, 'in' and 'not in' membership operator. | Introduction to python modules. Importing a python modules, namespace, and aliasing. Standard built-in modules and functions | Introduction to Numpy, Installing numpy. NumPy arrays vs Python lists, NumPy data types | Methods to create NumPy arrays. Operations on NumPy Array | Introduction to <br> Relational <br> Databases and Structured query Language (SQL). What is DBMS, need, components and advantages? |
| INFORMATICS <br> (PRACTICALS) | 1) Program on String traversing. <br> 2) Program using different String operations Compare, concat and substring | 1) Program to create an access a list. <br> 2) Program to join two lists. | 1) Program to find the max, min and mean value in the given list. <br> 2) Program to count the frequency of a Number in a list. | 1) Program to perform linear search on the given list. <br> 2) Program to find the $3^{\text {rd }}$ largest in the given list. | 1) Import NumPy and print the version no. <br> 2) To create an array of 1-D containing Numeric values. |


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| PSYCHOLOGY <br> (PRACTICAL) | SUBSTITUTION LEARNING |  |  |  |  |
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| WORK <br> EXPERIENCE | Prepare an excel sheet on any automobile company and perform following operations: inserting, deleting, and renaming a sheet, changing column width and row height. | Prepare an excel sheet on any departmental store and perform following functions: Merging Cells, Cell range ,Fonts, Alignment, Wrap Text | Prepare an excel sheet containing employee payroll report including following functions: text Orientation, Border and Shading | Prepare a report on the sales performance of the employees and calculate the commission and center align the sheet horizontally and vertically. | Prepare an excel sheet and use built in functions to find sum, average, max, min and count. |
| GENERAL STUDIES | Group Discussion <br> Based on the topics <br> Uses and misuses of technology in the fields of health care,agriculture,education etc) |  |  |  |  |
| PE | 1.Preparing students for Annual Sports day <br> -Teaching the formation \& rehearsal of drill. <br> -Conducting Heats \& trials. <br> -Athletic meet. <br> 2.Subject to availability of time what was done in first Session will also be continued. <br> 3.Evening Games. |  |  |  |  |


|  | 4.C.B.S.E Cluster / National |
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| -Selection of Students |  |
| -Participation |  |
| 5. Winter Coaching. |  |

