



TAPOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS 2024-25

SUBJECT: BIOLOGY

CLASS: XI

Sr. No.	Month	No of Working days	No. & Name of the Chapter / Lesson	Content / Sub Topics	Experiments / Activities
1	June	23	8.Cell: The Unit of life 9.Cell Cycle and Cell Division	What is a cell? Cell Theory, An overview of Cell, Prokaryotic cells and Eukaryotic cells, Structure of prokaryotic and eukaryotic cells, cell organelles: Structure and function; endomembrane system, endoplasmic reticulum, Golgi bodies, lysosomes, vacuoles, mitochondria, ribosomes, plastids, microbodies; cytoskeleton, cilia, flagella, centrioles (ultrastructure and function); nucleus. Plasma membrane and cell wall structure, Nucleus, Chromosomes and its types Cell cycle, M-Phase, significance of Mitosis, Meiosis and Significance of Meiosis.	Mitosis in onion root tip cells and animal cells (grasshopper) from permanent slides. Worksheets(CBQ,NCERT EXEMPLAR,PBYQ) /Resource sheets/Power Point Presentation
2	July	26	10.Biomolecules 1.The Living World 2. Biological Classification	Primary and secondary metabolites, Bio macromolecules, proteins, polysaccharides, Nucleic acids, structure of proteins, types of bonds, Concept of Metabolism, metabolic basis of living, the living state. The Living World Biodiversity; Need for classification; three domains of life; taxonomy and systematics; concept of species and taxonomical hierarchy; binomial nomenclature.	Study and describe flowering plants of families Solanaceae. Study of specimens/slides/models and identification with reasons. Study distribution of stomata on leaf surface by preparing temporary slide.

3	August	22	<p>Plant Kingdom</p> <p>Animal Kingdom</p>	<p>Five kingdom classification; Salient features and classification of Monera, Protista and Fungi into major groups; Lichens, Viruses and Viroids.</p> <p>Classification of plants into major groups; Salient and distinguishing features and a few examples of Algae, Bryophyta, Pteridophyta, Gymnosperm. Salient features and classification of animals, non-chordates up to phyla level and chordates up to class level (salient features and at a few examples of each category). (No live animals or specimen should be displayed).</p>	<p>Test for presence of sugar, starch, proteins and fats in suitable plant and animal materials.</p> <p>Worksheets (CBQ, NCERT EXEMPLAR, PBYQ)/Resource sheets/Power Point Presentation</p>
4	September	23	<p>5. Morphology of flowering plants</p> <p>6. Anatomy of Flowering Plants.</p>	<p>Morphology of different parts of flowering plants: root, stem, leaf and their modifications. Inflorescence, the flower, fruit, seed Semi-technical description of typical flowering plants. Description of family Solanaceae</p> <p>Anatomy and function of tissue systems in Dicot and Monocots.</p>	<p>Study of plasmolysis in epidermal peels (e.g., Rhoec/lily leaves or flashy scale leaves of onion bulb)</p> <p>Comparative study of the rates of transpiration in the upper and lower surfaces of leaves.</p>
5	October	21	<p>7. Structural organization in Animals</p> <p>13. Photosynthesis in Higher Plants</p>	<p>Morphology, anatomy and functions of different systems (Digestive, Circulatory, Respiratory, Nervous & Reproductive) of Frog.</p> <p>Photosynthesis as a means of autotrophic nutrition; site of photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C₃ and C₄ pathways;</p>	<p>Worksheets (CBQ, NCERT EXEMPLAR, PBYQ)/Resource sheets/Power Point Presentation</p> <p>Pigment separation by paper chromatography from given plant material</p>

				of other organs in excretion; disorders -uremia renal failure, renal calculi, nephritis; dialysis and artificial kidney, kidney transplant.	
8	January	19	<p>20.Locomotion and Movement</p> <p>21.Neural control and coordination</p> <p>22.Chemical coordination and integration</p>	<p>Types of movement, Skeletal Muscle, contractile proteins and muscle contraction, Skeletal System and its functions.; joints; disorders of muscular and skeletal systems-myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout.</p> <p>Neuron and nerves; Nervous system in humans - central nervous system; peripheral nervous system and visceral nervous system; generation and conduction of nerve impulse</p> <p>Endocrine glands and hormones; human endocrine system - hypothalamus, pituitary, pineal, thyroid, parathyroid, adrenal, pancreas, gonads; mechanism of hormone action (elementary idea); role of hormones as messengers and regulators, hypo - and hyperactivity and related disorders; dwarfism, acromegaly, cretinism, goiter, exophthalmic goiter, diabetes, Addison's disease. Note: Diseases related to all the human physiological systems to be taught in brief.</p>	Worksheets(CBQ,NCERTEXEMPLAR,PBYQ)/Resource sheets/Power Point Presentation
9	February	22	Revision and Final examination		

Name of the Teacher: Ms. Punam Rathore Singh



TAPOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS 2024-2025

SUBJECT: Chemistry (043)

Class: XI

Sr. No.	Month	No. of Working Days	No. & Name of the Chapter / Lesson	Content / Sub Topics	Activities
1.	June	23	8) General organic chemistry	<ul style="list-style-type: none">General introduction, methods of purification, qualitative and quantitative analysis, classification and IUPAC nomenclature of organic compounds. Electronic displacements in a covalent bond: inductive effect, electromeric effect, resonance and hyper conjugation. Homolytic and heterolytic fission of a covalent bond: free radicals, carbocations, carbanions, electrophiles and nucleophiles, types of organic reactions.	<ul style="list-style-type: none">Basics of organic chemistry – Basic lab techniquesUnsaturation testSpecial element detectionClass testWorksheet for IUPAC naming.
2.	July	26	1) Some basic concepts of chemistry 2) Structure of atom	<ul style="list-style-type: none">General Introduction: Importance and scope of Chemistry. Nature of matter, laws of chemical combination, Dalton's atomic theory: concept of elements, atoms and molecules. Atomic and molecular masses, mole concept and molar mass, percentage composition, empirical and molecular formula, chemical reactions, stoichiometry and calculations based on stoichiometry.Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle, concept of orbitals, quantum numbers, shapes of s, p and d orbitals, rules for filling electrons in orbitals - Aufbau principle, Pauli's exclusion principle and Hund's rule, electronic configuration of atoms, stability of half-filled and completely filled orbitals.	<ul style="list-style-type: none">Basic lab techniques- standard solution preparation using molarity and v/v percentage concentration terms.Class test for chapter 1 of 25 marks.

3.	August	22	<p>3) Classification of elements and periodicity in properties</p> <p>4) Chemical bonding and molecular structure</p>	<ul style="list-style-type: none"> • Significance of classification, brief history of the development of periodic table, modern periodic law and the present form of periodic table, periodic trends in properties of elements -atomic radii, ionic radii, inert gas radii, Ionization enthalpy, electron gain enthalpy, electro negativity, valency. Nomenclature of elements with atomic number greater than 100. • 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, VSEPR theory, concept of hybridization, involving s, p and d orbitals and shapes of some simple molecules, molecular orbital theory of homonuclear diatomic molecules(qualitative idea only), Hydrogen bond. 	<ul style="list-style-type: none"> • Quantitative analysis – calculate molarity and strength of hydrochloric acid using standard solution of sodium carbonate. • Titration Basics
4.	September	23	9) Hydrocarbons	<ul style="list-style-type: none"> • Classification of Hydrocarbons Aliphatic Hydrocarbons: Alkanes - Nomenclature, isomerism, conformation (ethane only), physical properties, chemical reactions including free radical mechanism of halogenation, combustion and pyrolysis. Alkenes - Nomenclature, structure of double bond (ethene), geometrical isomerism, physical properties, methods of preparation, chemical reactions: addition of hydrogen, halogen, water, hydrogen halides (Markovnikov's addition and peroxide effect), ozonolysis, oxidation, mechanism of electrophilic addition. Alkynes - Nomenclature, structure of triple bond (ethyne), physical properties, methods of preparation, chemical reactions: acidic character of alkynes, addition reaction of - hydrogen, halogens, hydrogen halides and water. Aromatic Hydrocarbons: Introduction, IUPAC nomenclature, benzene: resonance, aromaticity, chemical properties: mechanism of electrophilic substitution. Nitration, sulphonation, halogenation, Friedel Craft's alkylation and acylation, directive influence of functional group in monosubstituted benzene. Carcinogenicity and toxicity. 	<ul style="list-style-type: none"> • Quantitative analysis – calculate molarity and strength of NaOH using standard solution of Oxalic acid.

5.	October	21	5) Thermodynamics	<ul style="list-style-type: none"> • Concepts of System and types of systems, surroundings, work, heat, energy, extensive and intensive properties, state functions. First law of thermodynamics -internal energy and enthalpy, heat capacity and specific heat, measurement of U and H, Hess's law of constant heat summation, enthalpy of bond dissociation, combustion, formation, atomization, sublimation, phase transition, ionization, solution and dilution. Second law of Thermodynamics (brief introduction) Introduction of entropy as a state function, Gibb's energy change for spontaneous and nonspontaneous processes, criteria for equilibrium. Third law of thermodynamics (brief introduction). 	<ul style="list-style-type: none"> • Qualitative analysis- salt analysis detection of an acid radical and basic radical from the following salts • Aluminum sulphate • Zinc sulphide • Barium chloride
6.	November	17	7) Redox reaction	<ul style="list-style-type: none"> • Concept of oxidation and reduction, redox reactions, oxidation number, balancing redox reactions, in terms of loss and gain of electrons and change in oxidation number, applications of redox reactions. 	<ul style="list-style-type: none"> • Salt analysis • Ammonium acetate • Copper nitrate • Magnesium chloride
7.	December	24	6) Equilibrium	<ul style="list-style-type: none"> • Equilibrium in physical and chemical processes, dynamic nature of equilibrium, law of mass action, equilibrium constant, factors affecting equilibrium - Le Chatelier's principle, ionic equilibrium- ionization of acids and bases, strong and weak electrolytes, degree of ionization, ionization of poly basic acids, acid strength, concept of pH, 	<ul style="list-style-type: none"> • PH detection of acids and bases. • Worksheet for thermodynamics and equilibrium including numerical and conceptual questions.
8.	January	19	6) Equilibrium	<ul style="list-style-type: none"> • Hydrolysis of salts (elementary idea), buffer solution, Henderson Equation, solubility product, common ion effect (with illustrative examples). 	<ul style="list-style-type: none"> • Worksheet and questions practice
9.	February	22		<ul style="list-style-type: none"> • Revision for final exam 	<ul style="list-style-type: none"> • Question practice and revision of required topic.
10.	March	09		Final exam	

Name of the Teacher: Preeti Koshti.



TAQOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS 2024-2025

Subject: Physics (042)

Class: XI Science

Sr. No	Month	No. of working days	No. & Name of the Chapter / Lesson	Content / Sub Topics	Activities/ Practicals
3	June	23	Chapter-1: Units and Measurements	Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. significant figures. Dimensions of physical quantities, dimensional analysis and its applications.	
4	July	26	Chapter-2: Motion in a Straight Line Chapter-3: Motion in a Plane	Basic Information about Differentiation and Integration. Frame of reference, Motion in a straight line, Elementary concepts of differentiation and integration for describing motion, uniform and non- uniform motion, and instantaneous velocity, uniformly accelerated motion, velocity - time and position-time graphs. Relations for uniformly accelerated motion (graphical treatment). Scalar and vector quantities; position and displacement vectors, general vectors and their notations; equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors. Unit vector; resolution of a vector in a plane, rectangular components, Scalar and Vector product of vectors. Motion in a plane, cases of uniform velocity and uniform acceleration projectile motion, uniform circular motion.	1. To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Calipers and hence find its volume.
5	August	22	Chapter-4: Laws of Motion	Intuitive concept of force, Inertia, Newton's first law of motion; momentum and Newton's second law of motion; impulse; Newton's third law of motion. Law of conservation of linear momentum and its applications. Equilibrium of concurrent forces, Static and kinetic friction, laws of friction, rolling friction, lubrication. Dynamics of uniform circular motion: Centripetal force, examples of circular motion (vehicle on a level circular road, vehicle on a	2. To measure diameter of a given wire and thickness of a given sheet using screw gauge.

				banked road).	
6	September	23	<p>Chapter-5: Work, Energy and Power</p> <p>Chapter-6: System of Particles and Rotational Motion</p>	<p>Work done by a constant force and a variable force; kinetic energy, work energy theorem, power. Notion of potential energy, potential energy of a spring, conservative forces: non- conservative forces, motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.</p> <p>Centre of mass of a two-particle system, momentum conservation and Centre of mass motion. Centre of mass of a rigid body; centre of mass of a uniform rod. Moment of a force, torque, angular momentum, law of conservation of angular momentum and its applications. Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, comparison of linear and rotational motions. Moment of inertia, radius of gyration, values of moments of inertia for simple geometrical objects (no derivation).</p>	<p>3. To determine volume of an irregular lamina using screw gauge.</p> <p>4. Using a simple pendulum, plot its L-T² graph and use it to find the effective length of second's pendulum.</p> <p>5. To study variation of time period of a simple pendulum of a given length by taking bobs of same size but different masses and interpret the result.</p>
7	October	21	Chapter-7: Gravitation	Kepler's laws of planetary motion, universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth. Gravitational potential energy and gravitational potential, escape velocity, orbital velocity of a satellite.	6. To study the relationship between force of limiting friction and normal reaction and to find the co-efficient of friction between a block and a horizontal surface.
8	November	17	<p>Chapter-8: Mechanical Properties of Solids</p> <p>Chapter-9: Mechanical Properties of Fluids</p>	<p>Elasticity, Stress-strain relationship, Hooke's law, young's modulus, bulk modulus, shear modulus of rigidity (qualitative idea only), Poisson's ratio; elastic energy.</p> <p>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, Bernoulli's theorem and its simple applications. Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension ideas to drops, bubbles and capillary rise.</p>	7. To determine radius of curvature of a given spherical surface by a spherometer.

9	December	24	<p>Chapter-10: Thermal Properties of Matter</p> <p>Chapter-11: Thermodynamics</p>	<p>Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; C_p, C_v - calorimetry; change of state - latent heat capacity. Heat transfer-conduction, convection and radiation, thermal conductivity, qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law.</p> <p>Thermal equilibrium and definition of temperature zeroth law of thermodynamics, heat, work and internal energy. First law of thermodynamics, second law of thermodynamics: gaseous state of matter, change of condition of gaseous state -isothermal, adiabatic, reversible, irreversible, and cyclic processes.</p>	8. To study the relationship between the temperature of a hot body and time by plotting a cooling curve.
10	January	19	<p>Chapter-12: Kinetic Theory</p> <p>Chapter-13: Oscillations</p>	<p>Equation of state of a perfect gas, work done in compressing a gas. Kinetic theory of gases - assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecules; degrees of freedom, law of equi-partition of energy (statement only) and application to specific heat capacities of gases; concept of mean free path, Avogadro's number. Periodic motion - time period, frequency, displacement as a function of time.</p> <p>Periodic functions and their application. Simple harmonic motion (S.H.M) and its equations of motion; phase; oscillations of a loaded spring- restoring force and force constant; energy in S.H.M. Kinetic and potential energies; simple pendulum derivation of expression for its time period.</p>	
11	February	22	Chapter-14: Waves	Wave motion: Transverse and longitudinal waves, speed of travelling wave, displacement relation for a progressive wave, principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats.	

Name of the Teacher: Dr. Rahul Dubey (PGT Physics)



TAPOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS 2023-24

SUBJECT: MATHEMATICS (041)

Class: XI

Sr. No.	Month	No. of Working Days	No. & Name of the Chapter / Lesson	Content / Sub Topics	Activities
1.	June	22	Ch :1 Sets Ch :5 Complex Numbers and Quadratic Equations	Sets and their representations, Empty set, Finite and Infinite sets, Equal sets, Subsets, Subsets of a set of real numbers especially intervals (with notations). Universal set. Venn diagrams. Union and Intersection of sets. Difference of sets. Complement of a set. Properties of Complement. Need for complex numbers, especially to be motivated by inability to solve some of the quadratic equations. Algebraic properties of Complex numbers. Argand plane.	To verify distributive law for three given non-empty sets A, B and C, that is $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$
2.	July	25	Ch :2 Relations & Functions Ch :9 Sequence and Series	Ordered pairs. Cartesian product of sets. Number of elements in the Cartesian product of two finite sets. Cartesian product of the set of reals with itself (upto $\mathbb{R} \times \mathbb{R}$). Definition of relation, pictorial diagrams, domain, co-domain and range of a relation. Function as a special type of relation. Pictorial representation of a function, domain, co-domain and range of a function. Real valued functions, domain and range of these functions, constant, identity, polynomial, rational, modulus, signum, exponential, logarithmic and greatest integer functions, with their graphs. Sum, difference, product and quotients of functions. Sequence and Series. Arithmetic Mean (A.M.)	An alternative approach to obtain the formula for the sum of square of first n natural numbers.

				Geometric Progression (G.P.), general term of a G.P., sum of n terms of a G.P., infinite G.P. and its sum, geometric mean (G.M.), relation between A.M. and G.M.	
3.	August	23	Ch :15 Statistics Ch :12 Introduction to Three-dimensional Geometry	Measures of Dispersion: Range, Mean deviation, variance and standard deviation of ungrouped/grouped data. Coordinate axes and coordinate planes in three dimensions. Coordinates of a point. Distance between two points	To explain the concept of octants by 3 mutually perpendicular planes.
4.	September	19	Ch:6 Linear Inequalities	Linear inequalities. Algebraic solutions of linear inequalities in one variable and their representation on the number line.	Graphical solution of linear equation in two variables
5.	October	22	Ch :3 Trigonometric Functions Ch :7 Permutations and Combinations	Positive and negative angles. Measuring angles in radians and in degrees and conversion from one measure to another. Definition of trigonometric functions with the help of unit circle. Truth of the identity $\sin^2 x + \cos^2 x = 1$, for all x. Signs of trigonometric functions. Domain and range of trigonometric functions and their graphs. Expressing $\sin(x \pm y)$ and $\cos(x \pm y)$ in terms of $\sin x$, $\sin y$, $\cos x$ & $\cos y$ and their simple applications. Deducing identities like the following: $\frac{\tan x \pm \tan y}{1 \mp \tan x \tan y} = \tan(x \pm y), \cot(x \pm y) = \frac{\cot x \cot y \mp 1}{\cot y \pm \cot x}$ $\sin \alpha \pm \sin \beta = 2 \sin \frac{1}{2}(\alpha \pm \beta) \cos \frac{1}{2}(\alpha \mp \beta)$ $\cos \alpha + \cos \beta = 2 \cos \frac{1}{2}(\alpha + \beta) \cos \frac{1}{2}(\alpha - \beta)$ $\cos \alpha - \cos \beta = -2 \sin \frac{1}{2}(\alpha + \beta) \sin \frac{1}{2}(\alpha - \beta)$ Identities related to $\sin 2x$, $\cos 2x$, $\tan 2x$, $\sin 3x$, $\cos 3x$ and $\tan 3x$. Fundamental principle of counting. Factorial n. (n!) Permutations and combinations, derivation of Formulae for nPr and nCr and their connections, simple applications.	To verify the relation between degree measure and the radian measure of an angle. To find numbers of ways in which 3 cards can be selected from the 5 cards

6.	November	12	Ch :8Binomial Theorem	Historical perspective, statement and proof of the binomial theorem for positive integral indices. Pascal's triangle, simple applications.	
7.	December	24	Ch :10Straight Lines Ch :11 Conic Sections	Brief recall of two dimensional geometry from earlier classes. Slope of a line and angle between two lines. Various forms of equations of a line: parallel to axis, point -slope form, slope-intercept form, two-point form, intercept form, Distance of a point from a line. Sections of a cone: circles, ellipse, parabola, hyperbola, a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section. Standard equations and simple properties of parabola, ellipse and hyperbola. Standard equation of a circle.	To construt a parabola.
8.	January	20	Ch :13Limits and Derivatives Ch :15 Probability	Derivative introduced as rate of change both as that of distance function and geometrically. Intuitive idea of limit. Limits of polynomials and rational functions trigonometric, exponential and logarithmic functions. Definition of derivative relate it to slope of tangent of the curve, derivative of sum, difference, product and quotient of functions. Derivatives of polynomial and trigonometric functions. Events; occurrence of events, 'not', 'and' and 'or' events, exhaustive events, mutually exclusive events, Axiomatic (set theoretic) probability, connections with other theories of earlier classes. Probability of an event, probability of 'not', 'and' and 'or' events.	
9.	February	24	REVISION FOR FINAL EXAM		

Name of the Teacher : Ms. Survinder Kaur



TAPOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS
2024-2025

SUBJECT: Applied Arts

Class: 11 Humanities

Sr. No.	Month	No. of Working Days	No. & Name of the Chapter / Lesson	Content / Sub Topics	Activities
1	April	24	-----	-----	-----
2.	May	04	-----	-----	-----
3.	June	23	<ul style="list-style-type: none"> The Elements and principles of Art Unit -1 Pre-Historic Rock Painting 	<ul style="list-style-type: none"> Period and location Study and Appreciation Of Following Pre-Historical Paintings: Bhimbetka 	<ul style="list-style-type: none"> Picture Composition Typography (name Typography) Indian Traditional folk Painting (Mandala) Nature study (landscape)
4.	July	26	<ul style="list-style-type: none"> Pre-historic rock painting Unit -1 (B) Art of Indus valley civilization 	<ul style="list-style-type: none"> Wizard dance Roaring animal Period and location Extension: In about 1500 miles 	<ul style="list-style-type: none"> Still life (poster color) Logo-symbol Typography-Lettering Typography-Lettering
5.	August	22	<ul style="list-style-type: none"> Unit -1 (B) Art of Indus valley Civilization 	<ul style="list-style-type: none"> Harappa and Mohenjo Daro (now in Pakistan) Ropar, Lothal, Rangpur, Alamgir, Kali Bangan, Bana Vali and Dhola Vira (in India) 	<ul style="list-style-type: none"> Picture composition Still life (any medium) Nature life (monochrome) Still life
6.	September	23	<ul style="list-style-type: none"> Unit -1 Art of Indus Valley Civilization Unit -2 Buddhist, Jain and Hindu art 	<ul style="list-style-type: none"> Bronze casting bull seal Mother goddess (terracotta) location:-Mohenjo Daro Dancing girl (Mohenjo Daro) circa 	<ul style="list-style-type: none"> Picture composition Layout Magazine cover Book design lettering

				2500 Bc <ul style="list-style-type: none"> • Male Torso (Harappa) • General Introduction to art during Mauryan, Shunga, Kushan (Gandhara and Mathura Style) • Gupta period 	
7.	October	21	<ul style="list-style-type: none"> • Unit -2 Buddhist, Jain and Hindu art 	<ul style="list-style-type: none"> • Lion Capital from Sarnath • Chauri Bearer from Didar Ganj • Seated buddha from Katra Tila (mount) • Jain Tirthankara • Seated Buddha (Sarnath) 	<ul style="list-style-type: none"> • Lettering • Layout • Still life (monochrome color)
8.	November	17	<ul style="list-style-type: none"> • Introduction to Ajanta location (art of Ajanta) • Unit -3 Temple sculptures, Bronzes and Indo Islamic architecture 	<ul style="list-style-type: none"> • Bodhisattva Padma Pani • Mara Vijay • Introduction to Temple sculpture • Decent of ganga • Ravana Shaking mount Kailash • Trimurti • Lakshmi Narayana (Kandariya Mahadev Temple) • Cymbal player • Mother and Child 	<ul style="list-style-type: none"> • poster design • Still life • Still life • Nature study
9.	December	24	<ul style="list-style-type: none"> • unit – 4 Bronzes and Artistic Aspects of Indo-Islamic Architecture: • Indian Bronzes 	<ul style="list-style-type: none"> • Introduction to Indian bronzes • Method of Casting (solid and Hollow) • Study of following South Indian Bronze • Uma {Parvati Devi} • Natraj • Taj mahal 	<ul style="list-style-type: none"> • Poster design • Still life
10	January	19	<ul style="list-style-type: none"> • Indo-Islamic Architecture 	<ul style="list-style-type: none"> • Gol Gumbaj • Qutab Minar 	<ul style="list-style-type: none"> • Practice work
11	February	22	Revision	Revision	<ul style="list-style-type: none"> • Practice work

Name of the Teacher: Krishna Jani



TAPOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS 2024-25

SUBJECT: COMPUTER SCIENCE (083)

CLASS: XI

Sr. No.	Months	No. of Working Days	No. & Name of the Chapter / Lesson	Content / Sub Topic	Practical's
1	June	23	Ch-6 Getting started with python	<ul style="list-style-type: none">• Introduction to Python• Advantages & disadvantages of Python• Types of modes• Installation Process	Practical Based on basic programs in Python.
2	July	26	Ch-7 Python Fundamentals	<ul style="list-style-type: none">• Python Character set• Tokens• Variables & Assignments• Simple input & Output function• Elements of Program• L-value and R-value• Dynamic Typing	Practical Based on basic programs in Python.
3	August	22	Ch-8 Data Handling	<ul style="list-style-type: none">• Python Data Types• Mutable/Immutable Data types• Variable Internals• Operators• Type Conversion• Python Modules using import• Debugging• Errors and exceptions	Practical Based on various data types , loops, statements in Python

4	September	23	Ch-9 Flow of Control	<ul style="list-style-type: none"> • Types of statements • If statements of Python • The Range() function • Looping statements 	Practical Based on various loops, statements in Python
5	October	21	Ch-10 String Manipulation Ch- 11 List Manipulation	<ul style="list-style-type: none"> • Traversing a string • String operators • String slices, functions and methods • Creation of a list, • Traversal of a list. • Operations on a list-concatenation, repetition, • Membership • Functions/methods • Lists Slicing • Nested lists 	Programs based on String, List, Tuples
6	November	17	Ch-12 Tuples	<ul style="list-style-type: none"> • Creation of a Tuple • Traversal of a tuple. • Operations on a tuple - concatenation, repetition, • membership • Functions/methods • Nested tuple • Tuple slicing 	Programs based on Tuples
7	December	24	Ch-13 Dictionaries Ch-15 Cyber Safety	<ul style="list-style-type: none"> • Introduction to Dictionaries • Creation, accessing elements of a dictionary, add • An item, modify an item in a dictionary; • Traversal, • Functions/methods • Safely browsing the web, identity protection, • Confidentiality, cyber trolls and bullying. 	Programs based on Dictionaries

				<ul style="list-style-type: none"> • Safely accessing web sites: malware, viruses, • Trojans, adware. 	
8	January	19	<p>Ch-16 Online Access and computer security</p> <p>Ch-17 Society Law and ethics</p>	<ul style="list-style-type: none"> • Digital Footprints, Net etiquettes • Safely communicating data: secure connections, • Eavesdropping, phishing and identity verification. • Intellectual property rights, plagiarism and licensing, open-source software. • E-waste management: proper disposal of used electronic gadget • Privacy laws, fraud; cyber-crime-phishing , illegal • downloads, child pornography, scams; cyber • Forensics, IT Act. • Technology and society 	
9	February+ March	22+9	Revision For Final Exam		

Name of the Teacher: Mr. SHEEMON S



TAPOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS 2024-25

SUBJECT: English (301)

Class: XI

Sr.No.	Month	No.of Working Days	No. & Name of the Chapters / Lessons	Content / Sub Topics	Experiments / Activities
1	JUNE	23	<u>HORN BILL</u> 1. The Portrait of a Lady A Photograph (Poem) <u>SNAPSHOTS</u> 1.The summer of the beautiful white horse <u>HORN BILL</u> 2. We are not Afraid to Die...	<ul style="list-style-type: none">● Kushwant Singh gives a vivid picture of his grandmother.● She is given a godly stature.● Rapport between Khushwant Singh and his grandmother. ● Significance of old photographs in our lives.● Poetess' nostalgic feeling about her lost mother. ● Two children conscience stricken decides to give back to its owner the horse they have stolen.● Description of the main characters and the tribe. ● Importance of family and its importance during disaster.● Description of the disaster they faced.	<p>Write an essay on the person you admire the most.</p> <p>Write a letter to your mother thanking her for loving you selflessly.</p> <p>What is conscience & why is it important in life?</p> <p>Make a mind-map of the chapter.</p>

			<p><u>WRITING SKILLS</u></p> <p>Notice Writing</p>	<ul style="list-style-type: none"> ● Notice writing & its format ● Types of Notices 	Notice Writing
2	JULY	26	<p><u>HORN BILL</u> 3. Discovering Tut the Saga continues</p> <p>The Laburnum Top (Poem)</p> <p><u>SNAPSHOTS</u> 2. The Address</p> <p><u>WRITING SKILLS</u> Advertisement</p> <p>Conduction of Listening Assessment (ASL)</p>	<ul style="list-style-type: none"> ● Discovery of Tut's Mummy ● Use of science and technology to discover facts about the mummy. ● Description of the bird and its movements in a literary way with explanation. ● A girl's search for her mother's belongings. ● Significance of the title of the lesson. ● Sale of goods / services ● Educational opportunities ● Property ● Lost / found <p>ASL task will be conducted to assess their listening skill.</p>	<p>Make a mind-map of the chapter.</p> <p>Make a list of figures of speech</p> <p>Discussion on 'Why should we practice Detachment'?</p> <p>Exercise on Advertisement</p> <p>Worksheet for ASL</p>

3	AUGUST	22	<p><u>HORN BILL</u></p> <p>The Voice of the Rain (Poem)</p> <p><u>WRITING SKILLS</u></p> <p>Letter Writing</p> <ul style="list-style-type: none"> • Order Letter • Letter to the editor 	<ul style="list-style-type: none"> • Scientific explanation of the cycle of Rain. • Figures of Speech • Literal explanation of the poem. <ul style="list-style-type: none"> • Essentials of letter Writing. • Writing business letters to send orders, inquiry and complaints. 	<p>List of figures of speech</p> <p>Exercise on Letter Writing.</p>
4	SEPTEMBER	23	<p><u>GRAMMAR</u></p> <p>Tenses</p> <p><u>WRITING SKILLS</u></p> <p>Speech & debate writing</p>	<ul style="list-style-type: none"> • Types of Tenses and its usage. <ul style="list-style-type: none"> • Essentials of speech and debate writing 	<p>Worksheet for Tenses</p> <p>Writing Speech and Debate</p>
5	OCTOBER	21	<p><u>HORN BILL</u></p> <p>Childhood (Poem)</p> <p><u>GRAMMAR</u></p> <p>Clauses</p> <p>Modals</p> <p>Note Making and summarising</p>	<ul style="list-style-type: none"> • Poet's feeling towards childhood and growing up. • Kinds of clause: noun clause, adjective clause, adverb clause • Modal auxiliaries • What is note making and its importance. • What is summarising? 	<p>Write a paragraph on 'What one thing you want to do as a child'?</p> <p>Worksheet for Note-making and summarising</p>

6	NOVEMBER	17	<p><u>HORN BILL</u></p> <p>Father to Son (Poem)</p> <p><u>SNAPSHOTS</u></p> <p>3. Mother's Day</p> <p>4. Birth</p>	<ul style="list-style-type: none"> • An autobiographical poem. • Relationship between father and son. • A humorous portrayal of a mother in the family. • A mother standing for her rights. • Importance of a child in the parents' life • Balancing psychological condition and profession 	<p>Write a letter to your father apologising for anything you did which hurt him.</p> <p>Debate on 'Is celebrating mothers' day enough to honor her'?</p>
7	DECEMBER	24	<p><u>HORN BILL</u></p> <p>4. An Adventure</p> <p>5. Silk Road</p> <p><u>SNAPSHOTS</u></p> <p>5. The Tale of Melon City</p>	<ul style="list-style-type: none"> • An adventurous story in the Pre-independence era involving Marathas, The Mughals, the Anglo-Indians. • The author's adventurous experience while scaling the hilly terrains. • Humor and irony of the poem • Relation with today's politics and society • Understand the gist of the poem 	<p>Write a paragraph on any science fantasy based thought</p> <p>Prepare a small video as a travelogue</p> <p>Write the figures of speech</p>
8	JANUARY	19	Revision	Revision of Chapters, Poems, Grammar and Writing skills.	
9	FEBRUARY	22	Project and Revision	Conduction of –VIVA based on project and revision	

NAME OF THE TEACHER: Ms. Kalpana Trivedi Ms. Shailja Achalla



TAQOVAN INTERNATIONAL SCHOOL

YEARLY SYLLABUS 2024-25

SUBJECT: Entrepreneurship (066)

Class: 11 Com./ Hum./Sc.

Sr. No.	Month	No. of working days	No. & Name of the Lesson	Content / Sub Topics	Activities
1	June	23	L-1. Entrepreneurship: Concept and Function	Concept of entrepreneurship: .Functions of entrepreneurship. Need for entrepreneurship in our economy. Myths, advantages and disadvantages of entrepreneurship. Process of entrepreneurship Entrepreneurship in the Indian scenario.	Class test will be taken on this lesson. Presentation into the classroom and group discussion and project based.
2	July	26	L-2. An Entrepreneur	Differentiate between various types of entrepreneur. Competencies of an entrepreneur. Meaning and Importance of ethics. Ethics required to an entrepreneur. Entrepreneurial values and attitudes. Motivation process and Maslow's theory.	Value based questions Case study and class test UT – I Exams. (29th July to 3rd August) Class test will be taken on this lesson.
3	August	22	L-2. An Entrepreneur L-3. Entrepreneurial Journey	Differentiate between Employee and Entrepreneur. Meaning and Importance of Intrapreneurship in an organization. Business Ideas and ways to generate ideas. Concept of business plan and its elements. Feasibility study and its types Understand the reasons for success and failure of business plan.	Case studies and examples. Make a list of types of entrepreneurs. Class test will be taken on this lesson. Project work will be given. Present their own business plan through making of their own efforts.
4	Sep.	23	L-4. Entrepreneurship as Innovation and Problem Solving	Role of innovations in entrepreneurial ventures. Concept and importance of social entrepreneurship. Role of technology and social media in creating new forms of business.	Value based questions Case study and class test Half yearly Exams. (21st Sep. to 30th Sep.) Class test will be taken on this

			L-5. Market Concept	Market: Traditional and other authors E- commerce and E- business, concept and role Market environments (micro and macro) Market research process.	lesson. Problems based solution and presentation on how digitalization can use in business.
5	Oct.	21	L-5. Market Concept	Market Survey: Concept, Importance and process. Marketing mix: product, place, price and promotions. Pricing and factor affecting pricing. Physical distribution, Promotion and its tools.	Value based questions Case study and class test Assessment given Class test will be taken on this lesson.
6	Nov.	17	L-6. Business Arithmetic	Unit of sale, Unit price and unit cost for single product or service Types of costs: Start up, Variable and fixed. Break even analysis- for single product or service.	Class test will be taken on this lesson. Group discussion and presentation into the classroom.
7	Dec.	24	L-7.Resource Mobilization	Types of resources- Human, Capital, financial and intangible resources Selection and utilization of human resources and professionals like Accountants, Lawyers, Auditors, Board Members, etc. Features of angel investors and venture capitalist firms.	UT – II Exam. (2 nd Dec. to 7 th Dec.) Presentation into the class through some example on different type of resource use in business.
8	Jan.	19	Revision and Class test	It starts from lesson 1 with examples and solving of worksheets.	Project Work On Market Survey
9	Feb.	22	Revision and Class test	It starts from lesson next of finished in January with examples and solving of worksheets.	Class test Value based questions Case study base questions
10	Mar	09			Final Exam. begins at 28 th Feb.

Name of the Teacher: PRABIR DAS



TAPOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS 2024-25

SUBJECT: PHYSICAL EDUCATION

Class:11

Sr. No	Month	No. of Working Days	No. & Name of the Chapter / Lesson	Content / Sub Topics	Activities
1	June	23	V. Physical Fitness, Wellness and Life style I.Changing Trends and Career in physical education	<ul style="list-style-type: none">• Meaning and importance of physical fitness, wellness and lifestyle.• Components of wellness• Traditional Sports & Regional Games for Promoting wellness• Leadership through Physical Activity and Sports• Introduction to First Aid – PRICE • Concept, Aims & Objective of Physical education• Development of Physical Education in India – Post Independence• Changing Trends in sports- Playing surface, wearable gears and sports equipment, technological advancements• Career Options in Physical education• Khelo-india and Fit-India program	Showing video of how to maintain physical fitness. Doing fitness exercise. Chat on career in physical education.
2	July	26	III. Yoga	<ul style="list-style-type: none">• Meaning and importance of yoga• Elements of yoga• Introduction to Yogic Kriyas• Pranayama and its types.• Active Lifestyle and stress management through Yoga • Ancient and Modern Olympics• Olympics- Concept and Olympics Values(Excellence, Friendship & Respect)• Olympic Moment Structure- IOC, NOC, IFS, Others Members• Olympic Value Education – Joy of Effort, Fair Play, Respect for Others, Pursuit of Excellence,	Different Asana practices Showing video of Olympic games history. Chart Olympic event.

			II. Olympism	<ul style="list-style-type: none"> Balance Among Body, Will & Mind Olympics - Symbols, Motto, Flag, Oath, and Anthem 	
3	August	22	VI. Test and Measurement in sports VIII. Fundamentals of Kinesiology and Biomechanics in Sports	<ul style="list-style-type: none"> Concept of Test, Measurement & Evaluation in physical education & Sports Importance of Test, Measurements and Evaluation in Sports. Calculation of BMI, Waist – Hip Ratio, Skin fold measurement (3-site) Somato Types (Endomorphy, Mesomorphy&Ectomorphy) Measurements of health-related fitness Definition and Importance of Kinesiology and Biomechanics in sports Principles of Biomechanics Kinetics and Kinematics in sports Type of Body Movements- Flexion, Extension, Abduction, Adduction, Rotation, Circumduction, Supination & Pronation Axis and Planes – Concept and its application in body movements 	<p>Practice on Calculation of BMI</p> <p>Practices on Different type of body movement</p>
4	September	23	IX. Psychology and sports	<ul style="list-style-type: none"> Definition and importance of psychology in physical education and sports Developmental Characteristics at Different Stages of Development; Adolescent problems and their management Team Cohesion and Sports Introduction to Psychological Attributes: Attention, Resilience, Mental Toughness 	On ground practical on different stages in games/sports.
5	October	21	IV. Physical Education & Sports for CWSN	<ul style="list-style-type: none"> Aims & objective of Adaptive physical education Concept of Disability and Disorder Types of Disability, its causes & nature Role of various professionals for children with special needs 	Group discussion on adaptive & integrated physical education
6	November	17	VII.Fundamental of anatomy and	<ul style="list-style-type: none"> Define anatomy, physiology and its importance Function of skeleton system, classification of 	Charts on different functions of bones

			physiology& kinesiology	bones and types of joint <ul style="list-style-type: none"> • Properties and Functions of Muscles • Function and structure of Circulatory system and heart • Function and structure of respiratory system 	
7	December	24	X. Training and Doping in sports	<ul style="list-style-type: none"> • Concept of sports training • Principles of sports training • Training Load: Over Load, Adaptation, and Recovery • Warming-up & Limbering Down – Types, Method & Importance • Concept of skill, Technique, Tactics & Strategies • Concept of Doping and its Disadvantages 	Practical on different techniques and style of game
8	January	19		Revision	
9	February	22		Revision	
10	March	9		Revision	

Name of the Teacher: Dr. Rajesh patel



TAPOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS 2024-25

SUBJECT: PSYCHOLOGY (037)

Class: XI

Sr. No.	Month	No. of Working Days	No. & Name of the Chapter / Lesson	Content / Sub Topics	Experiments / Activities
1	June	23	1. What is Psychology?	<ul style="list-style-type: none">▪ Introduction▪ What is Psychology?<ul style="list-style-type: none">• Psychology as a Discipline• Psychology as a Natural Science• Psychology as a Social Science.▪ Understanding Mind and Behaviour▪ Popular Notions about the Discipline of Psychology▪ Evolution of Psychology▪ Development of psychology in India▪ Branches of Psychology▪ Psychology and other Disciplines▪ Psychology in Everyday Life.	Project on Psychology School and Branches

2	July	2	2. Methods of Enquiry in Psychology	<ul style="list-style-type: none"> ▪ Introduction ▪ Goals of Psychological enquiry Steps in Conducting Scientific Research Alternative Paradigms of Research ▪ Nature of Psychological Data ▪ Some Important methods in Psychology <ul style="list-style-type: none"> • Observational Method • Experimental Method • Correlational Method • Survey Research • Psychological Testing • Case Study ▪ Analysis of Data <ul style="list-style-type: none"> • Quantitative Method • Qualitative Method ▪ Limitations of psychological Enquiry Ethical Issues 	<p>Introduction to Psychological Experiments</p> <p>Students will conduct and report a study using Observational method and Survey research.</p> <p>Students will learn to collect data for case-study.</p>
3	August	22	4. Human Development	<ul style="list-style-type: none"> ▪ Introduction ▪ Meaning of Development <ul style="list-style-type: none"> • Life-Span Perspective on Development ▪ Factors Influencing Development, <ul style="list-style-type: none"> • Context of Development ▪ Overview of Developmental Stages <ul style="list-style-type: none"> • Prenatal Stage • Infancy • Childhood • Challenges of Adolescence • Adulthood and Old Age 	<p>Students will enact problems faced during adolescence through skit.</p> <p>Students will visit an old age shelter to understand the challenges faced during old age period.</p>

4	September	23	5. Sensory, Attentional and Perceptual Process	<ul style="list-style-type: none"> ▪ Introduction ▪ Knowing the World ▪ Nature and Variety of Stimulus Sense Modalities <p>Functional Limitation of Sense Organs</p> <ul style="list-style-type: none"> ▪ Attentional Processes <p>Selective Attention Sustained Attention</p> <ul style="list-style-type: none"> ▪ Perceptual Processes <li style="padding-left: 20px;">Processing Approaching in Perception ▪ The Perceiver ▪ Principles of Perceptual Organisation ▪ Perception of Space, Depth and Distance <p>Monocular Cues and Binocular Cues</p> <ul style="list-style-type: none"> ▪ Perceptual Constancies ▪ Illusions ▪ Socio-Cultural Influences on Perception 	<p style="text-align: center;">Practical 1 Meaningfulness of learning materials.</p>
5	October	21	6. Learning	<ol style="list-style-type: none"> 1. Introduction 2. Nature of Learning 3. Paradigms of Learning 4. Classical Conditioning <ul style="list-style-type: none"> • Determinants of Classical Conditioning 5. Operant/Instrumental Conditioning <ul style="list-style-type: none"> • Determinants of Operant Conditioning • Key Learning Processes 6. Observational Learning 7. Cognitive Learning 8. Verbal Learning 9. Skill Learning 10. Factors Facilitating Learning 11. Learning Disabilities 	<p>Group Discussion on types of learning.</p> <p>To show video clippings of learning disabilities.</p> <p>Invite psychologist or mental health professional to speak to the students about their work, career paths, and experiences in the field.</p>

6	November	17	7. Human Memory	<ul style="list-style-type: none"> ▪ Introduction ▪ Nature of Memory ▪ Information Processing Approach <p>The Stage Model</p> <ul style="list-style-type: none"> ▪ Memory System- sensory, Short term and Long-term Memories ▪ Level of Processing ▪ Types of Long-term Memory <p>Declarative and Procedural; Episodic and Semantic</p> <ul style="list-style-type: none"> ▪ Nature and causes of forgetting ▪ Forgetting due to Trace Decay, Interference and Retrieval Failure ▪ Enhancing memory Mnemonics using Images and Organisation 	<p style="text-align: center;">Practical 2 Span of Attention</p>
7	December	24	8. Thinking	<ul style="list-style-type: none"> ▪ Introduction ▪ Nature of Thinking <ul style="list-style-type: none"> • Building Blocks of Thought ▪ The Processes of Thinking ▪ Problem Solving ▪ Reasoning and Decision Making ▪ Nature and Process of Creative Thinking ▪ Thought and Language <ul style="list-style-type: none"> • Development of Language and Language Use 	<p>Assign creative projects such as designing posters, creating videos, or writing stories that illustrate psychological concepts or theories. This allows students to demonstrate their understanding in a creative and engaging way.</p>

8	January	19	9. Motivation and Emotion	<ul style="list-style-type: none"> ▪ Introduction ▪ Nature of Motivation ▪ Types of Motives <ul style="list-style-type: none"> Biological Motives Psychological Motives ▪ Maslow's Hierarchy of Needs ▪ Nature of Emotions ▪ Expression of Emotions <ul style="list-style-type: none"> Culture and Emotional Expression Culture and Emotional Labelling ▪ Managing Negative emotions ▪ Enhancing Positive emotions 	<p>Project on Maslow's Hierarchy of needs</p> <p>Teach students mindfulness techniques and lead them through mindfulness exercises to promote emotional regulation, stress reduction, and overall well-being.</p> <p>Encourage students to keep a psychology journal.</p>
9	February	22	Revision	<p>Revision of Practical</p> <ul style="list-style-type: none"> ➤ Meaningfulness of learning material ➤ Span of attention <p>on of the complete course</p>	
10	March	09	<p>Revision of the complete course</p> <p>Annual Examination</p>		

Name of the Teacher: Ms. Avani Makani