TAPOVAN INTERNATIONAL SCHOOL

YEARLY SYLLABUS 2025-26

SUBJECT: English (301) **Class: XI**

Sr.No.	Month	No. of Working Days	No. & Name of the Chapter / Lesson	Content / Subtopics	Activities
1	**JUNE**	23	**HORNBILL** Prose 1. The Portrait of a Lady Poetry 1. A Photograph **SNAPSHOTS** 1. The Summer of the Beautiful White Horse **GRAMMAR** Verb Forms **READING COMPREHENSION** Note-making & Summarization	1. Introduction of the author, his literary works, genre, content characters, main protagonist, theme, plot, sub-plot, explanation of lines, discussion and explanation of textual as well as value-based questions. 2. Introduction of the poets, their work, theme of the poems and appreciation of poetic writing skills. 3. Understanding the correct use of forms of Verbs and how to use them with different tenses. 4. Students will become aware of what is note-making and why is it important and also learn the format and usage of Note-making & Summarization.	Solving exercises from textbook. Write summary of poem. Group discussion on what is conscience & why is it important. Write an essay on the person you admire the most. Students will solve Worksheet on Note-making & Summarization.
2	**JULY**	26	**HORNBILL** Prose 2. We are Not Afraid to Die…. Poetry 2. The Laburnum Top **SNAPSHOTS** 2. The Address **GRAMMAR** Tenses & Transformation of Sentences	1. Students will know the importance of family and its significance during disaster through the description of the disaster faced by a family. 2. Introduction of the poet, and poem theme as well as the poetic devices and the language used by the poet to describe a bird and its movements in a literary way with explanation. 3. Students will know about a girl's search for her mother's belongings along with the significance of the title of the lesson. 4. Understanding the correct use of tenses (forms of verbs) and transformation of sentences into different tenses.	Students will discuss their views about family's importance. Discussion on 'Why should we practice Detachment'? Students will prepare a chart of Tenses. Students will solve a Worksheet on Tenses and Transformation.

			WRITING SKILLS Advertisement **Conduction of Speaking & Listening Assessment (ASL) for Term- I.**	5. Learning of Advertisement Writing format, types and necessary requisites. a) Sale of goods/services b) Educational opportunities b) Property d) Lost / found ASL task will be conducted to assess their listening skill.	Students will write different types of advertisements. **Worksheet for ASL.**
3	**AUG**	18	**HORNBILL** Prose 3. Discovering Tut: The Saga Continues Poetry 3. The Voice of Rain **GRAMMAR** Reordering of Sentences **WRITING SKILLS** Poster Making Speech Writing	1. Brief introduction of Egyptian King Tut. 2. Students will know about the discovery of Tut's Mummy and use of science and technology to discover facts about the mummy. 3. Students will gain knowledge of scientific explanation of the cycle of Rain. 4. Literal explanation of the poem will be done. 5. Students will brush up their skills of reordering jumbled sentences. 6. Learning of poster making and speech writing along with the necessary requisites.	Students will collect information of King Tut. Students will make the mind-map of the chapter. Students will make a list of figures of speech. Students will solve a Worksheet on Reordering of Sentences. Students will make few posters and write speeches on the given situations.
4	**SEPT**	25	**HORN BILL** Poetry 4. Childhood **SNAPSHOTS** 3. Mother's Day **WRITING SKILLS** Debate Writing **READING COMPREHENSION** Descriptive & Factual passages	1. Students will know about the poet's feelings towards childhood and growing up. 2. Students will enjoy a humorous portrayal of a mother in the family and what happens when she stands for her rights. 3. Learning the format of debate and its essentials. 4. Students will know the purpose and significance of reading comprehension to enhance vocabulary ● Types of comprehensive passages	Students will write a paragraph on 'What one thing you want to do as a child'? Group discussion on the rights of a mother in a family. Students will be given few situations to write debates. Worksheets for descriptive and factual passages.

5	**OCT**	12	**HORNBILL** Prose 4. The Adventure **GRAMMAR** Clauses **WRITING SKILL** Letter Writing – Order Letter	1. Students will gain knowledge about an adventurous story in the Pre- Independence era involving Marathas, The Mughals & the Anglo-Indians. 2. Understanding of various kinds of clauses: noun clause, adjective clause & adverb clause in required context. 3. Learning of essentials of Letter Writing, its format. (Writing business letters to send orders, inquiry and complaints.)	Conduct multiple exercises from text along with character sketch writing. Students will write a paragraph on any science fantasy-based thought. Students will solve a Worksheet on Clauses. Students will write few order letters.
6	**NOV**	22	**HORNBILL** Poetry 5. Father to Son **SNAPSHOTS** 4. Birth **WRITING SKILL** Letter Writing – Letter to the Editor	1. Introduction of an autobiographical poem written that describes the relationship between father and son. 2. Introduction of the chapter that enables students to know about the importance of a child in parents' life & appreciate the way a doctor balances his psychological condition & profession. 3. Students will learn the format and usage of Editorial Letters.	Students will write a letter to their fathers' apologising for anything they did which hurt them. Students will do character analysis and role-playing of Dr. Andrew Manson, Mrs. Gwyn, Joe morgan and other family members.
7	**DEC**	25	**HORN BILL** 5. Silk Road **SNAPSHOTS** 5. The Tale of Melon City **GRAMMAR** Modals **WRITING SKILL** Notice Writing	1. Introduction of the chapter through which students can appreciate the author's adventurous experience while scaling the hilly terrains. 2. Students will understand the gist of the poem & enjoy the humour and irony of the poem related to today's politics and society. 3. Understanding of various Modal Verbs in various contexts & learning the Notice Writing format & its requisites.	Students will prepare a small video as a travelogue. Students will discuss the irony of the king's demise and the melon's reign, and explore the message about power and governance. Students will solve a worksheet on Modals.
8	**JAN**	17	**Revision of Writing Skills** **Submission of Project Work & Conduction of Speaking Skill for Term- II.**	Revision of writing skills and conduction of speaking skill & VIVA based on project.	Students will prepare & submit their projects and give their speaking task.
9	**FEB**	23	**Revision for Final Exam**	Revision of all topics in Grammar & Literature. Enhancing the skills of comprehension and content writing.	Solving multiple exercises from sample papers & worksheets.
10	**MARCH**	10	**Conduction of Final Exam**	Enhancing the skills of comprehension & writing.	

NAME OF THE TEACHER: Ms. Kalpana Trivedi, Ms. Sailaja Achalla

TAPOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS 2025-2026

Subject: Physics (042) Class: XI Science

Sr.No	Month	No. of working days	No. & Name of the Chapter / Lesson	Content / Sub Topics	Activities/ Practicals
1	**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.	
2	**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 calorimeter using Vernier Calipers and hence find its volume.
3	**August**	**18**	**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 banked road).	2. To measure diameter of a given wire and thickness of a given sheet using screw gauge.

4	**September**	**25**	**Chapter–5: Work, Energy and Power** **Chapter–6: System of Particles and Rotational Motion**	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. 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).	3. To determine volume of an irregular lamina using screw gauge. 4. Using a simple pendulum, plot its L-T 2 graph and use it to find the effective length of second's pendulum. 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.
5	**October**	**12**	**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.
6	**November**	**22**	**Chapter–8: Mechanical Properties of Solids** **Chapter–9: Mechanical Properties of Fluids**	Elasticity, Stress-strain relationship, Hooke's law, young's modulus, bulk modulus, shear modulus of rigidity (qualitative idea only), 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, 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.	7. To determine radius of curvature of a given spherical surface by a spherometer.

7	**December**	**25**	**Chapter–10: Thermal Properties of Matter** **Chapter–11: Thermodynamics**	Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; Cp, Cv - 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. 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.	8. To study the relationship between the temperature of a hot body and time by plotting a cooling curve.
8	**January**	**17**	**Chapter–12: Kinetic Theory** **Chapter–13: Oscillations** **Chapter–14: Waves**	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. 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. Wave motion: Transverse and longitudinal waves, speed of travelling wave, displacement relation for a progressive wave.	Activity related to SHM.
9	**February**	**23**	**Chapter–14: Waves**	principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats.	Activity related to sound wave.

10	**March**	**10**	**Revision**	**Chapterwise Revision**	

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

TAPOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS 2025-2026

SUBJECT: Chemistry (043) ` Class: XI

Sr. No.	Month	No.of Working Days	No. & Name of the Chapter / Lesson	Content / Subtopics	Activities
1.	June	23	1) Some basic concepts of chemistry 2) Structure of atom	• 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.	• Basics of organic chemistry – Basic lab techniques • Unsaturation test • Special element detection • Class test • Worksheet for IUPAC naming.
2.	July	26	3) Classification of elements and periodicity in properties	• 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, electronegativity, valency. Nomenclature of elements with atomic number greater than 100.	• Basic lab techniques- standard solution preparation using molarity and v/v percentage concentration terms. • Class test for chapter 1 of 25 marks.

3.	Aug	18	4) 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, 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.	• Quantitative analysis – calculate molarity and strength of hydrochloric acid using standard solution of sodium carbonate. • Titration Basics
4.	Sep	25	8) General Organic chemistry 9) Hydrocarbons	• 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 hyperconjugation. Homolytic and heterolytic fission of a covalent bond: free radicals, carbocations, carbanions, electrophiles and nucleophiles, types of organic reactions. • 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 Crafts alkylation and acylation, directive influence of functional group in monosubstituted benzene. Carcinogenicity and toxicity.	• Quantitative analysis – calculate molarity and strength of NaOH using standard solution of Oxalic acid.

5.	Oct	12	5) Thermodynamics	• 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).	• Qualitative analysis- salt analysis detection of an acid radical and basic radical from the following salts • Aluminum sulphate • Zinc sulphide • Barium chloride
6.	Nov	22	7) Redox reaction	• 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.	• Salt analysis • Ammonium acetate • Copper nitrate • Magnesium chloride
7.	Dec	25	6) Equilibrium	• 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,	• PH detection of acids and bases. • Worksheet for thermodynamics and equilibrium including numerical and conceptual questions.
8.	Jan	17	6) Equilibrium	• Hydrolysis of salts (elementary idea), buffer solution, Henderson Equation, solubility product, common ion effect (with illustrative examples).	• Worksheet and questions practice
9.	Feb	23		• Revision for final exam	• Question practice and revision of required topics.
10.	March	10		Final exam	

Name of the Teacher: Gaurang

TAPOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS 2025-26

SUBJECT: **MATHEMATICS (041)** Class: **XI**

Sr. No.	Month	No.of Working Days	No. & Name of the Chapter / Lesson	Content / Sub Topics	Activities
1.	June	23	**Ch :1 Sets** **Ch :2 Relations & Functions**	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. 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 R x R x 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.	I)To verify distributive la for three given non-empty sets A, B and C , that is AU(BUC) =(AUB) ∩ (AUC)
2.	July	26	**Ch :4 Complex Numbers and Quadratic Equations** **Ch :8 Sequence and Series**	Need for complex numbers, especially to be motivated by inability to solve some of the quadratic equations. Algebraic properties of Complex numbers. Argand plane. relation. Sequence and Series.Arithmetic Mean (A.M.) 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.	Formulae of relation between different sets. Graphs of different functions.

3.	August	18	**Ch:5 Linear Inequalities** **Ch :13 Statistics**	Linear inequalities. Algebraic solutions of linear inequalities in one variable and their representation on the number line. Measures of Dispersion: Range, Mean deviation, variance and standard deviation of ungrouped/grouped data	
4.	September	25	**Ch :11 Introduction to Three-dimensional Geometry**	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.
5.	October	12	**Ch :3 Trigonometric Functions**	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 sin2x + cos2x = 1, for all x. Signs of trigonometric functions. Domain and range of trigonometric functions and their graphs. Expressing sin (x±y) and cos (x±y) in terms of sinx, siny, cosx & cosy and their simple applications. Deducing identities like the following: $\frac{\tan x \pm \tan y}{1 \mp \tan x \tan y} = \tan(x \pm y)$, $\cot(x \pm y) = \frac{\cot x \cot y \mp 1}{\cot y \pm \cot x}$ $\sin\alpha \pm \sin\beta = 2\sin\frac{1}{2}(\alpha \pm \beta)\cos\frac{1}{2}(\alpha \mp \beta)$ $\cos\alpha + \cos\beta = 2\cos\frac{1}{2}(\alpha + \beta)\cos\frac{1}{2}(\alpha - \beta)$ $cos\alpha - cos\beta = -2sin\frac{1}{2}(\alpha + \beta)sin\frac{1}{2}(\alpha - \beta)$ Identities related to sin2x, cos2x, tan2 x, sin3x, cos3x and tan3x.	To verify the relation between degree measure and the radian measure of an angle.
6.	November	22	**Ch :6 Permutations and Combinations** **Ch :7 Binomial Theorem**	Fundamental principle of counting. Factorial n. (n!) Permutations and combinations, derivation of Formulae for nPr and nCr and their connections, simple applications. Historical perspective, statement and proof of the binomial theorem for positive integral indices. Pascal's triangle, simple applications.	To find numbers of ways in which 3 cards can be selected from the 5 cards

			Ch :9 Straight Lines	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.	
7.	December	25	**Ch :10 Conic Sections** **Ch :12 Limits and Derivatives**	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. 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 scope of tangent of the curve, derivative of sum, difference, product and quotient of functions. Derivatives of polynomial and trigonometric functions.	Study of section of conic: circles , ellipse, parabola and hyperbola
8.	January	17	**Ch :14 Probability**	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.	Axiomatic (set theoretic) probability, Theoritical approach to Probability.Definition and conditions for the Events .
9.	February	23	**REVISION FOR FINAL EXAM**		

Name of the Teacher : Ms. Survinder Kaur Mr. Sunil Israni

TAPOVAN INTERNATIONAL SCHOOL

YEARLY SYLLABUS 2025-26

SUBJECT: BIOLOGY (044) **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. Five kingdom classification; Salient features and classification of Monera, Protista and Fungi into major groups; Lichens, Viruses and Viroids.	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**	**18**	**3. Plant Kingdom**	Classification of plants into major groups; Salient and distinguishing features and a few examples of Algae, Bryophyta, Pteridophyta, Gymnosperm.	Test for presence of sugar, starch, proteins and fats in

			4. Animal Kingdom	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.	suitable plant and animal materials. Worksheets (CBQ, NCERT EXEMPLAR, PBYQ)/Resource sheets/Power Point Presentation
4	**September**	**25**	**5.Morphology of flowering plants** **6. Anatomy of Flowering Plants.**	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 Anatomy and function of tissue systems in Dicot and Monocots.	Study of plasmolysis in epidermal peels (e.g., Rhoeo/lily leaves or flashy scale leaves of onion bulb) Comparative study of the rates of transpiration in the upper and lower surfaces of leaves.
5	**October**	**12**	**7.Structural organization in Animals** **11.Phtosynthesis in Higher Plants**	Morphology, anatomy and functions of different systems (Digestive, Circulatory, Respiratory, Nervous & Reproductive) of Frog. 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; factors affecting photosynthesis..	Worksheets(CBQ,NCERT EXEMPLAR,PBYQ)/Resource sheets/Power Point Presentation Pigment separation by paper chromatography from given plant material

6	**November**	**22**	**12.Respiration in plants** **13.Plant Growth and Development** **14.Breathing and exchange of gases**	Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient. Seed germination; phases of plant growth and plant growth rate; conditions of growth; differentiation, dedifferentiation and redifferentiation; sequence of developmental processes in a plant cell; plant growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA. Respiratory organs in animals (recall only); Respiratory system in humans; mechanism of breathing and its regulation in humans - exchange of gases, transport of gases and regulation of respiration, respiratory volume; disorders related to respiration - asthma, emphysema, occupational respiratory disorders.	Rate of respiration in buds/germinating seeds Test for presence of urea in urine. Test for presence of sugar in urine. Test for presence of albumin in urine. Test for presence of bile salts in urine.
7	**December**	**25**	**15.Body fluids and circulation**	Composition of blood, blood groups, coagulation of blood; composition of lymph and its function; human circulatory system - Structure of human heart and blood vessels; cardiac cycle, cardiac output, ECG; double circulation; regulation of cardiac activity; disorders of circulatory system - hypertension, coronary artery disease, angina pectoris, heart failure.	Practical revision
8	**January**	**17**	**17.Locomotion and Movement**	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.	

			18.Neural control and coordination **19.Chemical coordination and integration**	Neuron and nerves; Nervous system in humans - central nervous system; peripheral nervous system and visceral nervous system; generation and conduction of nerve impulse 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.	Worksheets (CBQ,NCERTEXEMPLAR,PBYQ)/Resource sheets/Power Point Presentation
9	**February**	**23**	**Revision and Final examination**		

Name of the Teacher: Ms. Punam Rathore Singh

TAPOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS 2025-26

SUBJECT: PHYSICAL EDUCATION (048) 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	• 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	Showing video of how to maintain physical fitness. Doing fitness exercise.
			I. Changing Trends and Career in physical education	• 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	Chat on career in physical education.

2	July	26	III. Yoga II. Olympism	• 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, Balance Among Body, Will & Mind • Olympics - Symbols, Motto, Flag, Oath, and Anthem	Different Asana practices Showing video of Olympic games history. Chart Olympic event.
3	August	18	VI. Test and Measurement in sports	• 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	Practice on Calculation of BMI
4	September	25	VIII. Fundamentals of Kinesiology and Biomechanics in Sports	• Definition and Importance of Kinesiology and Biomechanics in sports • Principles of Biomechanics • Kinetics and Kinematics in sports • Type of Body Movements- Flexion, Extension,	Practices on Different type of body movement

			IX. Psychology and sports	Abduction, Adduction, Rotation, Circumduction, Supination & Pronation • Axis and Planes – Concept and its application in body movements • 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	12	IV. Physical Education & Sports for CWSN	• 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	22	VII. Fundamental of anatomy and physiology& kinesiology	• Define anatomy, physiology and its importance • Function of skeleton system, classification of bones and types of joint • Properties and Functions of Muscles • Function and structure of Circulatory system and heart • Function and structure of respiratory system	Charts on different functions of bones

7	December	25	X. Training and Doping in sports	• Concept of sports training • Principles of sports training • Training Load: Over Load, Adaptation, and Recovery	Practical on different techniques and style of game
8	January	17	X. Training and Doping in sports (continue…..)	• 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
9	February	23	Revision	Revision	Revision
10	March	10	Final exam	Final exam	Final exam

Name of the Teacher: Kamlesh Raval

TAPOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS 2024-25

SUBJECT:COMPUTER SCIENCE(083) **Class: XI**

Sr.No.	Month	No. of Working Days	No. & Name of the Chapter / Lesson	Content / Sub Topics	Practicals
1	June	23	Ch-6 Getting started with python	• 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	• 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	18	Ch-8 Data Handling	• Python Data Types • Mutable/Immutable Datatypes • 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	25	Ch-9 Flow of Control	• Types of statements • If statements of Python • The Range() function • Looping statements	Practical Based on various loops, statements in Python

5	**October**	**12**	**Ch-10 String Manipulation** **Ch- 11 List Manipulation**	• 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**	**22**	**Ch-12 Tuples**	• 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**	**25**	**Ch-13 Dictionaries** **Ch-15 Cyber Safety**	• 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. • Safely accessing web sites: malware, viruses, • Trojans, adware.	Programs based on Dictionaries
8	**January**	**17**	**Ch-16 Online Access and computer security** **Ch-17 Society Law and ethics**	• 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	Practice questions Solving
9	**February+ March**	**23+10**	**Revision For Final Exam**		

Name of the Teacher: Mr.SHEEMON S

TAPOVAN INTERNATIONAL SCHOOL

YEARLY SYLLABUS 2025 - 26

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 in 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. (14th July to 18th July) Class test will be taken on this lesson.
3	August	18	L-2: An Entrepreneur L-3: Entrepreneurial Journey Project Work will be given for Half-yearly exam.	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.	25	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. (12st Sep. to 22th 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.	12	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.	22	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 in the classroom.
7	Dec.	25	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. (1st Dec. to 5th Dec.) Presentation in the class through some example on different type of resource use in business.
8	Jan.	17	Revision and Class test Project work for Final Exam.	It starts from lesson 1 with examples and solving of worksheets.	Project Work On Market Survey
9	Feb.	23	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.	13			Final Exam. begins at 28th Feb.

Name of the Teacher:PRABIR DAS

TAPOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS 2025-26

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?**	• Introduction • What is Psychology? 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. Methods of Enquiry in Psychology	• Introduction • Goals of Psychological enquiry • Steps in Conducting Scientific Research • Alternative Paradigms of Research • Nature of Psychological Data	Introduction to Psychological Experiments

2	**July**	**26**	**2. Methods of Enquiry in Psychology (Continue)** **3. Human Development**	• Some Important methods in Psychology Observational Method Experimental Method Correlational Method Survey Research Psychological Testing Case Study • Analysis of Data Quantitative Method Qualitative Method • Limitations of psychological Enquiry • Ethical Issues • Introduction • Meaning of Development • Life-Span Perspective on Development • Factors Influencing Development, Context of Development	Students will conduct and report a study using Observational method and Survey research. Students will learn to collect data for case-study.

3	**August**	**18**	**3. Human Development (Continue)** **4. Sensory, Attentional and Perceptual Process**	• Overview of Developmental Stages Prenatal Stage Infancy Childhood Challenges of Adolescence Adulthood and Old Age • Introduction • Knowing the World • Nature and Variety of Stimulus Sense Modalities Functional Limitation of Sense Organs • Attentional Processes Selective Attention Sustained Attention	Students will enact problems faced during adolescence through skit. Students will visit an old age shelter to understand the challenges faced during old age period.
4	**September**	**25**	**4. Sensory, Attentional and Perceptual Process**	• Perceptual Processes Processing Approaching in Perception • The Perceiver • Principles of Perceptual Organisation • Perception of Space, Depth and Distance Monocular Cues and Binocular Cues • Perceptual Constancies • Illusions • Socio-Cultural Influences on Perception	**Practical 1** Meaningfulness of learning materials.

5	**October**	**12**	**5. Learning**	• Introduction • Nature of Learning • Paradigms of Learning • Classical Conditioning Determinants of Classical Conditioning • Operant/Instrumental Conditioning Determinants of Operant Conditioning • Key Learning Processes • Observational Learning	To show video clippings of learning disabilities. To present project on Classical / Observational Learning.
6	**November**	**22**	**5. Learning (Continue)** **6. Human Memory**	• Cognitive Learning • Verbal Learning • Skill Learning • Factors Facilitating Learning • Learning Disabilities Introduction • Nature of Memory • Information Processing Approach The Stage Model • Memory System- sensory, Short term and Long-term Memories • Level of Processing • Types of Long-term Memory Declarative and Procedural; Episodic and Semantic • Nature and causes of forgetting • Forgetting due to Trace Decay, Interference and Retrieval Failure • Enhancing memory Mnemonics using Images and Organisation	**Practical 2** Span of Attention Activity: Listing (To check memory)

7	**December**	**25**	**7. Thinking**	• Introduction • Nature of Thinking • Building Blocks of Thought • The Processes of Thinking • Problem Solving • Reasoning and Decision Making • Nature and Process of Creative Thinking • Thought and Language Development of Language and Language Use	Different task given to the different groups to assess creative thinking among them.
8	**January**	**17**	**8. Motivation and Emotion**	• Introduction • Nature of Motivation • Types of Motives Biological Motives Psychological Motives • Maslow's Hierarchy of Needs • Nature of Emotions • Expression of Emotions Culture and Emotional Expression Culture and Emotional Labelling • Managing Negative emotions • Enhancing Positive emotions	Project on Maslow's Hierarchy of needs To give some techniques to the students to manage negative emotions and promote positive emotions. Encourage students to keep a psychology journal.
9	**February**	**23**	**Revision**	**Revision of Practical** ➢ Meaningfulness of learning material ➢ Span of attention Revision of the complete course	Doubt solving sessions
10	**March**	**10**	Revision of the complete course **Annual Examination**		

Name of the Teacher: Ms. Avani Makani

TAPOVAN INTERNATIONAL SCHOOL
YEARLY SYLLABUS 2025-26

SUBJECT: **MATHEMATICS (241)** Class: **XI Commerce**

Sr. No.	Month	No.of Working Days	No. & Name of the Chapter / Lesson	Content / Sub Topics	Activities
1	April	22	**-**	-	-
2.	June	23	**Ch-3 Sets**	Introduction Sets and their Representations The Empty Set Finite and Infinite Sets Equal Sets Subsets Universal Set Venn Diagrams Operations on Sets Complement of a Set Perform operations on sets to solve practical problems	To represent set theoretic operations using Venn diagrams
			Ch-4 Relations	Ordered pair, order of elements in an ordered pair and equality of ordered pairs Cartesian product of two nonempty sets Express relation as a subset of Cartesian product Find domain and range of a relation	Students will be asked to explain cartesian products studied in Set A and B that will be listed on the board.A ={ red,blue}and B = {b, c, s}, where b, c and s represent a particular bag, coat and Shirt then asked How many pairs of coloured objects can be made from these two sets? Then definition of relation will be given.

3.	July	26	**Ch-5 Sequence and Series** **Ch-6 Permutations and Combinations**	Differentiate between sequence and series Identify Arithmetic Progression (AP) Formulae of finding term and sum of n terms Arithmetic mean (AM) of two positive numbers Identify Geometric Progression (GP) Derive the term and sum of n terms of a given GP Geometric mean(GM) of two positive numbers Relation between AM and GM Introduction Fundamental Principle of Counting Definition of factorial Permutations Combinations	Random pattern will be given and students will be asked to find general term. To find the number of ways in which three cards can be selected from given five cards.
4.	August	18	**Ch-8 Calculus**	Dependent variable and independent variable Definition of domain, range and co-domain Types of functions Concepts of limits and continuity Instantaneous rate of change Derivatives of algebraic functions using Chain Rule	Differentiation concept will be explained graphically
5.	September	25	**Ch-9 Probability** **MID TERM EXAMINATION**	Probability Introduction Conditional Probability Multiplication Theorem on Probability Independent Events Bayes' Theorem Total Probability	To write the sample space, when a coin is tossed once, two times, three times, four times.
6.	October	12	**Ch-12 Coordinate Geometry**	Concept of Straight Line and its Graphical representation in 2D Plane Concept of Circles Graphical representation of Circles in 2D Plane Concept of Parabola Graphical representationof Parabola in 2D plane	Students will be asked to derive equation of circle by coordinate of a fixed point and a general point

7.	November	22	**Ch-1 Numbers and Quantification** **Ch-2 Numerical Applications**	Prime numbers, encryption data using prime numbers Concept of binary numbers Conversion of decimal number to binary number and vice – versa Conversion of fractional numbers from decimal number to binary and vice – versa Understand about Indices, Logarithms and Anti – logarithms Solve numerical problems on: a) Averages b) Calendar c) Clock d) Work, Time and Distance e) Mensuration f) Seating arrangement	MCQ MCQ
8.	December	25	**Ch-7 Mathematical and Logical Reasoning** **Ch-10 Descriptive Statistics**	Statements Special word phrases Quantifiers Implications Contra positive and converse Validating statements By contradiction Logical reasoning Types of data Data on various scales Data representation and visualization Data interpretation (central tendency, dispersion, deviation, variance, skewness and kurtosis) Percentile rank and quartile rank Correlation (Pearson and Spearman method of correlation) Applications of descriptive statistics using real time data	 They will be asked to calculate central tendencies from a set of data given to them.

9.	January	17	**Ch-11 Basics of Financial Mathematics**	Concept of interest and interest rate Present value, net present value and future value Concept of tax, calculation of tax and simple applications of tax calculation in Goods and Service tax, Income Tax Calculate bills, tariff rates, fixed charge, surcharge, service charge Calculate and interpret electricity bill, water supply bill and other supply bills Compare interest rates on various types of savings Calculate income tax Various types of bills and surcharges	Video (based on real life situations) will be shown to the students to create their interest in topic
10.	February	23	**Practical Work** **REVISION FOR FINAL EXAMINATION**		

Name of the Teacher: Ms. Priyanka Sharma