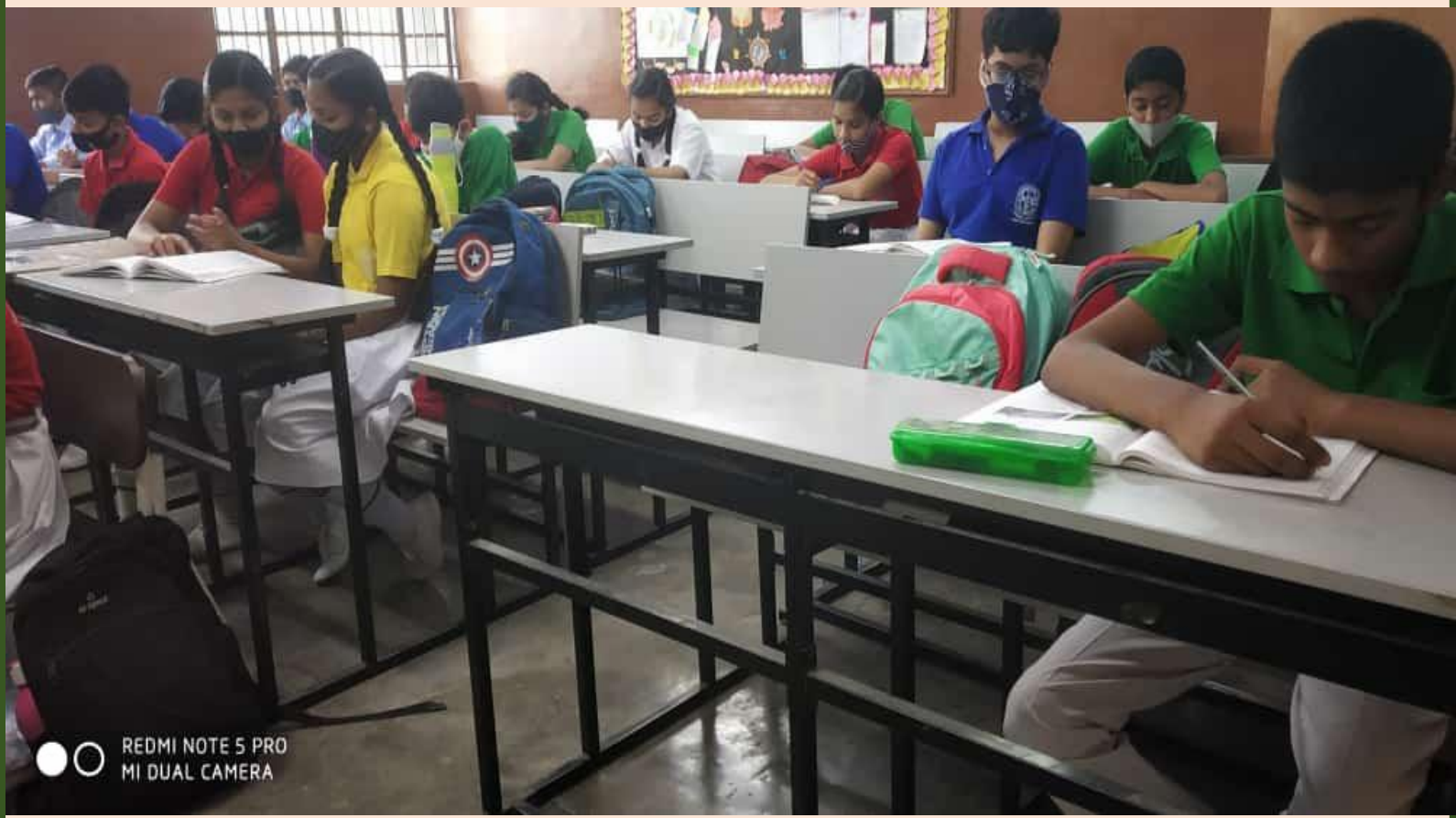
CHINMAYA VIDYALAYA

NTPC UNCHAHAR, RAEBARELI, UP

SYLLABUS BREAK UP

2024-25



XI

SYLLABUS

CHINMAYA VIDYALAYA
NTPC UNCHAHAR

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT ENGLISH**

S.NO.	MONTH	TOPIC/CHAPTER	SUB-TOPIC	ACTIVITY
1	APRIL	**Hornbill** L-1The Portrait of a lady P-1 A photograph L-2 We're not afraid to die…….	Classified Ads	Talk on the theme and sub theme of lessons
2	MAY	**Snapshots** 1 The Summer of the beautiful white horse 2 The Address	Poster making	Group Discussion
3	JUNE	**SUMMER BREAK**		
4	JULY	**Hornbill** L- 3 Discovering Tut Note Making P-2- The Laburnum top Grammar-Tenses and Verb forms L-7 The Adventure	Speech writing Debate writing	Debate
5	AUGUST	**Hornbill** P- The Voice of the rain. **Grammar-** Clauses **Snapshots** L-5 Mother's Day	Speech writing Debate writing	ASL

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT ENGLISH**

6	SEPTEMBER	Any pending topic Revision for Half Yearly Examination	Revision	
7	OCTOBER	**Hornbill** P- Childhood P-5 Father to son **Snapshots** L- 7 birth L-8 The Tale of a melon city	Official letters	Speech
8	NOVEMBER	**Hornbill** L- 8 Silk Road Any pending lesson Revision of writing section	Business letter	Project
9	DECEMBER	Revision of grammar topics Letter writing		Project
10	JANUAURY	Speech writing Debate writing practice questions		
11	FEBRUARY	Internal Assessments Annual exams commence		
12	MARCH	Annual Exams		

EXAMINATION WISE- SYLLABUS BREAK UP
SESSION- (2024-25)

S.NO.	NAME OF EXAM	SYLLABUS
1	W.R. 1	Lesson-1,2, Poem- 1
2	Half Yearly	Lesson- 1,2,3- Hornbill Poem- 1,2 Lesson-1,2- Snapshots Note Making Classified Advertisements Poster Debate Speech
3	W.R. 2	Lesson- 7- Hornbill, Poem- 3 Lesson- 5- Snapshots Grammar exercises
4	Annual	Lesson- 1,2,3,7,8 - Hornbill Poem- 1 to 5 Lesson-1,2, 5,7,8 - Snapshots Note Making Classified Advertisements Poster Debate Speech

MONTHLY SYLLABUS BREAKUP-SESSION-(2024-25)
CLASS – 11 SUBJECT - Hindi

S.NO.	MONTH	TOPIC/CHAPTER	SUB TOPIC	ACTIVITY
1	APRIL	नमक का दारोगा कबीर के पद मियॉ नसीरुद्दीन मीरा के पद		अपने मनपसंद पद के बारे में लिखिए जिसे आप प्राप्त करना चाहते हैं और क्यों ?
2	MAY.	गलता लोहा भारतीय गायिकाओं में बेजाड : लता मंगे''कर भाब्दको''ा अपठित गद्यां''ा एवं पद्यां''ा		छात्र कक्षा में लता जी के मनपसंद गीत प्रस्तुत करेंगे।
3	JUNE	**SUMMERBREAK**		
4	JULY	वे ऑखें घर की याद स्पीति में बारि''ा रचनात्मक लेखन गज़ल जामुन का पेड सबसे खरतनाक पत्र लेखन		छात्र हिमांचल प्रदे''ा का नक्''ा बनाकर स्पीति को द''ार्ाएँगे। छात्र प्रधानमंत्री को पोस्टकार्ड लिखकर किसी विशय को 'मन की बात' में भाामिल करने का अनुरोध करेंगे।

MONTHLY SYLLABUS BREAKUP-SESSION-(2024-25)
CLASS – 11 **SUBJECT - HINDI**

9	DECEMBER	राजस्थान की रजत बूँदें आलो–आँधारि		कक्षा के छात्र मिलकर एक कुई बनाएँगे और प्रयोग करके बताएँगे कि राजस्थान में कुई से पानी कैसे मिलता है ।
10	JANUARY	Revision		

EXAMINATION WISE- SYLLABUS BREAK UP
SESSION-(2024-25)

S.NO.	NAMEOFEXAM	SYLLABUS
1	प्री मिड टर्म	नमक का दारोगा कबीर के पद मियॉ नसीरुद्दीन
2	अद्र्धवार्शिक/मिड टर्म	मियॉ नसीरुद्दीन मीरा के पद अपठित गद्यां”ा भारतीय गायिकाओं में बेजाड़ : लता मंगे”ाकर भाब्दको”ा, पत्र
3	पोस्ट मिड टर्म	घर की याद स्पीति में बारि”ा जामुन का पेड पत्र लेखन

MONTHLY SYLLABUS BREAKUP-SESSION-(2024-25)
CLASS – 11 **SUBJECT - HINDI**

5	August	रजनी, हे भूख मत मचल आओ मिलकर बचाएँ व्यावहारिक लेखन	प्रतिवेदन, प्रेस विज्ञप्ति, परिपत्र, कार्य सूची, कार्य वृत	छात्र अपने इलाके की कौन–कौन–सी चीजें बचाना चाहते हैं ? छात्र इसकी एक सूची तैयार करेंगे।
6	SEPTEMBER	**EV- 1EXAM**		
7	OCTOBER	भारत माता जनसंचार माध्यम और पत्रकारिता के विविध आयाम आलो–ऑधारि, राजस्थान की रजत बूँदें		कक्षा के छात्र मिलकर एक कुई बनाएँगे और प्रयोग करके बताएँगे कि राजस्थान में कुई से पानी कैसे मिलता है ।
8	NOVEMBER	भारत माता जनसंचार माध्यम और पत्रकारिता के विविध आयाम		छात्र स्वच्छता के महत्त्व पर मुख्यमंत्री को पोस्टकार्ड लिखेंगे टोपी भाुक्ला के संवादों का नाटय मंचन छात्रों द्वारा किया जाएगा।

EXAMINATION WISE- SYLLABUS BREAK UP
SESSION-(2024-25)

S.NO.	NAMEOFEXAM	SYLLABUS
1	प्री मिड टर्म	नमक का दारोगा कबीर के पद मियॉ नसीरुद्दीन
2	अद्र्धवार्शिक/मिड टर्म	मियॉ नसीरुद्दीन मीरा के पद अपठित गद्यां”ा भारतीय गायिकाओं में बेजाड़ : लता मंगे”ाकर भाब्दको”ा, पत्र
3	पोस्ट मिड टर्म	घर की याद स्पीति में बारि”ा जामुन का पेड पत्र लेखन

MONTHLY SYLLABUS BREAKUP-SESSION-(2024-25)
CLASS – XI **SUBJECT –COMPUTER SCIENCE**

S.NO.	MONTH	TOPIC/CHAPTER	SUB-TOPIC	ACTIVITY
1	APRIL	Unit II: Computational Thinking and Programming – 1	Familiarization with the basics of Python programming, Knowledge of data types, Operators, Expressions, Errors,	Basic Python Programming
2	MAY	Unit II: Computational Thinking and Programming – 1	Conditional statements	If- Else programs
3	JUNE	**SUMMER BREAK**		
4	JULY	Unit II: Computational Thinking and Programming – 1	Strings and Tuples	String and Tuple Programs
5	AUGUST	Unit II: Computational Thinking and Programming – 1	Lists	List Programs
6	SEPTEMBER	Unit II: Computational Thinking and Programming – 1	Dictionary	Dictionary Programs
7	OCTOBER	Unit I: Computer Systems and Organization	Basic Computer Organization, Types of software , Operating system (OS)	Discuss the functioning of operating
8	NOVEMBER	Unit I: Computer Systems and Organization	Number system , Encoding schemes	Number conversion
9	DECEMBER	Unit III: Society, Law and Ethics	Digital Footprints, Digital society and Netizen, Data protection, Cyber-crime	Cyber Safety Quiz and Drama

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT –COMPUTER SCIENCE**

S.NO.	MONTH	TOPIC/CHAPTER	SUB-TOPIC	ACTIVITY
10	JANUAURY	Unit III: Society, Law and Ethics	Cyber safety, Safely accessing web sites, E-waste management, Indian Information Technology Act (IT Act) Technology & Society	Information Technology Act Activity
11	FEBRUARY	Revision of Syllabus	Revision of Syllabus	
12	MARCH	Final Examination	Final Examination	

EXAMINATION WISE- SYLLABUS BREAK UP
SESSION- (2024-25)

S.NO.	NAME OF EXAM	SYLLABUS
1	**Written Test-I**	Unit II: Computational Thinking and Programming – 1 Python Introduction, Operators, Conditional statements Error Handling, String
2	**Mid Term Examination**	Unit II: Computational Thinking and Programming – 1
3	**Written Test-II**	Unit I: Computer Systems and Organization
4	**Final Examination**	Complete Syllabus

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI

SUBJECT - PHYSICS

S.NO.	MONTH	TOPIC/CHAPTER	SUB-TOPIC	ACTIVITY
1	APRIL	Chapter–2: Units and Measurements Chapter–3: Motion in a Straight Line	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. 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)	
2	MAY	Chapter–4: Motion in a Plane	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.	

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI

SUBJECT - PHYSICS

S.NO.	MONTH	TOPIC/CHAPTER	SUB-TOPIC	ACTIVITY
3	JUNE	**SUMMERBREAK**	-----	
4	JULY	Chapter–5: 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).	
5	AUGUST	Chapter–6: Work, Energy and Power Chapter–7: System of Particles and Rotational	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. Motion 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).	

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI

SUBJECT - PHYSICS

S.NO.	MONTH	TOPIC/CHAPTER	SUB-TOPIC	ACTIVITY
6	SEPTEMBER	Chapter–8: 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.	
7	OCTOBER	Chapter–9: Mechanical Properties of Solids Chapter–11: Thermal Properties of Matter	Elasticity, Stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear modulus of rigidity (qualitative idea only), Poisson's ratio; elastic energy. Chapter–10: Mechanical Properties of Fluids 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. 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 .	

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT - PHYSICS**

S.NO.	MONTH	TOPIC/CHAPTER	SUB-TOPIC	ACTIVITY
8	NOVEMBER	Chapter–12: Thermodynamics	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. work done in compressing a gas.	
		Periods Chapter–13: Kinetic Theory Equation of state of a perfect 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.	

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT - PHYSICS**

S.NO.	MONTH	TOPIC/CHAPTER	SUB-TOPIC	ACTIVITY
9	DECEMBER	Chapter–14: Oscillation& Waves motion:	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 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.	
10	JANUAURY	REVISION		
11	FEBRUARY	REVISION AND ANNUAL EXAMINATION		
12	MARCH	ANNUAL EXAMINATION		

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT - PHYSICS**

EXAMINATION WISE- SYLLABUS BREAK UP
SESSION-(2023-24)

S.NO.	NAMEOFEXAM	SYLLABUS
1	**PRE MID-TERM**	Units and Measurements
2	**HALF YEARLY/MID-TERM**	Chapter–2: Units and Measurements Chapter–3: Motion in a Straight Line Chapter–4: Motion in a Plane Chapter–5: Laws of Motion Chapter–6: Work, Energy and Power
3	**POST MID-TERM**	Chapter–8: Gravitation
4	**ANNUAL EXAMINATION**	Chapter–2: Units and Measurements Chapter–3: Motion in a Straight Line Chapter–4: Motion in a Plane Chapter–5: Laws of Motion Chapter–6: Work, Energy and Power Chapter–7: System of Particles and Rotational Chapter–8: Gravitation Chapter–9: Mechanical Properties of Solids Chapter–11: Thermal Properties of Matter Chapter–12: Thermodynamics Periods Chapter–13: Kinetic Theory Equation of state of a perfect gas, Chapter–14: Oscillation & Waves motion:

MONTHLY SYLLABUS BREAKUP-SESSION-(2024-25)
CLASS – 11 **SUBJECT - CHEMISTRY**

S.NO.	MONTH	TOPIC/CHAPTER	SUB TOPIC
1	APRIL	SOME BASIC CONCEPTS OF CHEMISTRY	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.
2	APRIL-MAY	STRUCTURE OF ATOM	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.

MONTHLY SYLLABUS BREAKUP-SESSION-(2024-25)
CLASS – 11 **SUBJECT - CHEMISTRY**

S.NO.	MONTH	TOPIC/CHAPTER	SUB TOPIC
3	JUNE	SUMMER BREAK	.....
4	JULY	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, Electro negativity, valency. Nomenclature of elements with atomic number greater than 100.
5	AUGUST	CHEMICAL BONDING AND MOLECULAR STRUCTURE	Valence electrons, ionic bond, covalent bond, bond parameters, Lewis's 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.
6		CHEMICAL 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 ΔU and ΔH, 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 non- spontaneous processes, criteria for equilibrium. Third law of thermodynamics (brief introduction).

MONTHLY SYLLABUS BREAKUP-SESSION-(2024-25)
CLASS – 11 **SUBJECT - CHEMISTRY**

S.NO.	MONTH	TOPIC/CHAPTER	SUB TOPIC
7	SEPTEMBER	REDOX REACTIONS	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.
8	OCTOBER	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, hydrolysis of salts (elementary idea), buffer solution, Henderson Equation, solubility product, common ion effect (with illustrative examples).

MONTHLY SYLLABUS BREAKUP-SESSION-(2024-25)
CLASS – 11 **SUBJECT - CHEMISTRY**

S.NO.	MONTH	TOPIC/CHAPTER	SUB TOPIC
9	NOVEMBER	ORGANIC CHEMISTRY SOME BASIC PRINCIPLES AND TECHNIQUES	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.
10	DECEMBER	HYDROCARBONS	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, the 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.

MONTHLY SYLLABUS BREAKUP-SESSION-(2024-25)
CLASS – 11 **SUBJECT - CHEMISTRY**

S.NO.	MONTH	TOPIC/CHAPTER	SUB TOPIC
10	DECEMBER	HYDROCARBONS	Alkynes - Nomenclature, the 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 the functional group in monosubstituted benzene. Carcinogenicity and toxicity.
11	JANUAURY	REVISION	- - - - -
12	FEB-MARCH	REVISION AND ANNUAL EXAMINATION	-------

EXAMINATION WISE- SYLLABUS BREAK UP
SESSION-(2024-25)
CLASS-11 SUBJECT-CHEMISTRY

S.NO.	NAMEOFEXAM	SYLLABUS
1	WR-1/PRE MID-TERM	1. SOME BASIC CONCEPT OF CHEMISTRY 2. STRUCTURE OF ATOM
2	HALF YEARLY/MID-TERM	1. SOME BASIC CONCEPT OF CHEMISTRY 2. STRUCTURE OF ATOM 3. CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES 4. CHEMICAL BONDING 5. CHEMICAL THERMODYNAMICS
3,	WR-2/POST MID-TERM	6. EQUILIBRIUM 7. REDOX REACTION
4.	ANNUAL EXAMINATION	1. SOME BASIC CONCEPT OF CHEMISTRY 2. STRUCTURE OF ATOM 3. CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES 4. CHEMICAL BONDING 5. CHEMICAL THERMODYNAMICS 6. EQUILIBRIUM 7. REDOX REACTIONS 8. ORGANIC CHEMISTRY SOME BASIC PRINCIPLES AND TECHNIQUES 9. HYDROCARBONS

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT - BIOLOGY**

S.NO.	MONTH	TOPIC/CHAPTER	SUB-TOPIC	ACTIVITY
1	APRIL	1. THE LIVING WORLD 2. BIOLOGICAL CLASSIFICATION	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.	**A: List of Experiments** 1. Study and describe locally available common flowering plants, from family Solanaceae (Poaceae, Asteraceae or Brassicaceae can besubstituted in case of particular geographical location) including dissection and display of floral whorls, anther and ovary to show number of chambers (floral formulae and floral diagrams), type of root (tap and adventitious); type of stem (herbaceous and woody); leaf (arrangement, shape, venation, simple and compound).
2	MAY	3. PLANT KINGDOM	Classification of plants into major groups; Salient and distinguishing features and a few examples of Algae, Bryophyta, Pteridophyta, Gymnospermae (Topics excluded – Angiosperms, Plant Life Cycle and Alternation of Generations)	
3	JUNE	4. ANIMAL KINGDOM	Salient features and classification of animals, non-chordates up to phyla level.	
4	JULY	4. ANIMAL KINGDOM (Continued) 5. MORPHOLOGY OF FLOWERING PLANTS	Salient features and classification of chordates up to class level (salient features and at a few examples of each category). (No live animals or specimen should be displayed.) Morphology of different parts of flowering plants: root, stem, leaf, inflorescence, flower, fruit and seed. Description of family Solanaceae	

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT - BIOLOGY**

S.NO.	MONTH	TOPIC/CHAPTER	SUB-TOPIC	ACTIVITY
5	AUGUST	6. ANATOMY OF FLOWERING PLANTS 7. STRUCTURAL ORGANISATION IN ANIMALS	Anatomy and functions of tissue systems in dicots and monocots. Morphology, Anatomy and functions of different systems (digestive, circulatory,respiratory, nervous and reproductive) of frog	2. Preparation and study of T.S. of dicot and monocot roots and stems (primary). 3. Study of osmosis by potato osmometer. 4. Study of plasmolysis in epidermal peels (e.g. Rhoeo/lily leaves or flashy scale leaves of onion bulb). 5. Study of distribution of stomata on the upper and lower surfaces of leaves. 6. Comparative study of the rates of transpiration in the upper and lower surfaces of leaves. 7. Test for the presence of sugar, starch, proteins and fats in suitable plant and animal materials. 8. Separation of plant pigments through paper chromatography.
6	SEPTEMBER	8. CELL: THE UNIT OF LIFE	Cell theory and cell as the basic unit of life, structure of prokaryotic and eukaryotic cells; Plant cell and animal cell; cell envelope; cell membrane, cell wall; 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	
7	OCTOBER	9. BIOMOLECULES 10. CELL CYCLE AND CELL DIVISION	Chemical constituents of living cells: biomolecules, structure and function of proteins, carbohydrates, lipids, nucleic acids; Enzyme - types, properties, enzyme action. (Topics excluded: Nature of Bond Linking Monomers in a Polymer, Dynamic State of Body Constituents – Concept of Metabolism, Metabolic Basis of Living, The Living State) Cell cycle, mitosis, meiosis and their significance	

MONTHLY SYLLABUS BREAKUP-SESSION-(2024-25)
CLASS – XI **SUBJECT - BIOLOGY**

S.NO.	MONTH	TOPIC/CHAPTER	SUB-TOPIC	ACTIVITY
8	NOVEMBER	13 PHOTOSYNTHESIS IN HIGHER PLANTS 14. RESPIRATION IN PLANTS	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. 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.	9. Study of the rate of respiration in flower buds/leaf tissue and germinating seeds. 10. Test for presence of urea in urine. 11. Test for presence of sugar in urine. 12. Test for presence of albumin in urine. 13. Test for presence of bile salts in urine. **B. Study and Observe the following (spotting):** 1. Parts of a compound microscope. 2.Specimens/slides/models and identification with reasons - Bacteria, Oscillatoria, Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen.
9	DECEMBER	15. PLANT GROWTH AND DEVELOPMENT 17. BREATHING AND EXCHANGE OF GASES	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; 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.	

MONTHLY SYLLABUS BREAKUP-SESSION-(2024-25)
CLASS – XI **SUBJECT - BIOLOGY**

S.NO.	MONTH	TOPIC/CHAPTER	SUB-TOPIC	ACTIVITY
10	JANUARY	18. BODY FLUIDS AND CIRCULATION 19. EXCRETORY PRODUCTS AND THEIR ELIMINATION 20. LOCOMOTION AND MOVEMENT 21. NEURAL CONTROL AND COORDINATION 22. CHEMICAL COORDINATION AND INTEGRATION	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. Modes of excretion - ammonotelism, ureotelism, uricotelism; human excretory system – structure and function; urine formation, osmoregulation; regulation of kidney function - renin - angiotensin, atrial natriuretic factor, ADH and diabetes insipidus; role of other organs in excretion; disorders - uremia, renal failure, renal calculi, nephritis; dialysis and artificial kidney, kidney transplant. Types of movement - ciliary, flagellar, muscular; 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. 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.	3. Virtual specimens/slides/models and identifying features of - Amoeba, Hydra,liverfluke, Ascaris, leech, earthworm, prawn, silkworm, honey bee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit. 4. Mitosis in onion root tip cells and animals cells (grasshopper) from permanent slides. 5. Different types of inflorescence (cymose and racemose). 6. Human skeleton and different types of joints with the help of virtual images/models only

MONTHLY SYLLABUS BREAKUP-SESSION-(2024-25)
CLASS – XI **SUBJECT - BIOLOGY**

S.NO.	MONTH	TOPIC/CHAPTER	SUB-TOPIC	ACTIVITY
11	FEBRUARY	REVISION AND ANNUAL EXAMINATION		
12	MARCH	ANNUAL EXAMINATION		

MONTHLY SYLLABUS BREAKUP-SESSION-(2024-25)
CLASS – XI **SUBJECT - BIOLOGY**

EXAMINATION WISE- SYLLABUS BREAK UP
SESSION-(2023-24)

S.NO.	NAMEOFEXAM	SYLLABUS
1	Pre-Mid-Term	Chapter-1, 2 & 3
2	HY/Mid-Term	Chapter-1 to Chapter-7
3	Post-Mid-Term	Chapter-9, 10 & 13
4	Annual Examination	Unit-I to Unit-V (Chapter-1 to Chapter-22)

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT -MATHEMATICS**

S.NO.	MONTH	TOPIC/ CHAPTER	SUB-TOPIC	ACTIVITY
1	APRIL	L-1: Sets L-2: Relations & Functions	1.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.) 2.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.)	To represent set theoretic operations using Venn diagrams.
2	MAY	L-3 : Trigonometric Functions	3.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. Signs of trigonometric functions. Domain and range of trigonometric functions and their graphs. Expressing *sin (x±y)* and *cos (x±y* and their simple applications.	To find the values of sine and cosine functions in second, third and fourth quadrants using their given values in first quadrant
3	JUNE	**SUMMER BREAK**		
4	JULY	L-5: Complex Numbers & Quadratic Equation L-6: Linear Inequalities	5.Need for complex numbers, especially $\sqrt{-1}$, to be motivated by inability to solve some of the quadratic equations. Algebraic properties of complex numbers. Argand plane 6.Linear inequalities. Algebraic solutions of linear inequalities in one variable and their representation on the number line.	To obtain a quadratic function with the help of linear functions graphically.

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT -MATHEMATICS**

5	AUGUST	L-7 : Permutations & Combinations L-8 : Binomial Theorem	7. Fundamental principle of counting. Factorial *n*. (n!) Permutations and combinations, derivation of Formulae for nPr and nCr and their connections, simple applications. 8. Historical perspective, statement and proof of the binomial theorem for positive integral indices. Pascal's triangle, simple applications.	
6	SEPTEMBER	L-9 : Sequences and Series	9.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.	
7	OCTOBER	L-10 : Straight Lines L-11 : Conic Sections	10. 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. 11. 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 construct a parabola
8	NOVEMBER	L-12: Three Dimensional Geometry L-13 : Limits and Derivatives	12. Coordinate axes and coordinate planes in three dimensions. Coordinates of a point. Distance between two points. 13. 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.	Verification of the geometrical significance of derivative.

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT -MATHEMATICS**

9	DECEMBER	L-15 : Statistics L-16 : Probability	15. Measures of Dispersion: Range, Mean deviation, variance and standard deviation of ungrouped/grouped data. 16. 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.	To write the sample space, when a die is rolled once, twice To write the sample space, when a coin is tossed once, two times, three times,four times.
10	JANUAURY	Revision		
11	FEBRUARY	Revision		

EXAMINATION WISE- SYLLABUS BREAK UP
SESSION- (2024-25)

S.NO.	NAME OF EXAM	SYLLABUS
1	WR-1	1: Sets 2: Relations & Functions 3 : Trigonometric Functions
2	**HALF YEARL EXAMINATION**	1: Sets 2: Relations & Functions 3 : Trigonometric Functions 5: Complex Numbers & Quadratic Equation 6: Linear Inequalities 7 : Permutations & Combinations 8 : Binomial Theorem
3	**WR-2**	9 : Sequences and Series 10 : Straight Lines 11 : Conic Sections
4	**ANNUAL EXAMINATION**	Complete Syllabus

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT – FINE ARTS**

S.NO.	MONTH	TOPIC/CHAPTER	SUB-TOPIC	ACTIVITY
1	APRIL	Introduction	Art and introduction art and the culture	Still life pencil shading
2	MAY	" "	origin and development of different form s of Fine Arts in India	". "
3	JUNE	SUMMER BREAK		
4	JULY	Unit 1 Prehistoric Rock painting and art of Indus valle	Prehistoric Rock painting	Still life in watercolor
5	AUGUST	". "	Indus Valley Civilization	Still life colour pencil
6	SEPTEMBER	Unit-II Buddhist Jain and Hindu art third century BC to 8th century AD	The art during mauryan song Kushan and Gupta periods	". "
7	OCTOBER	". "	The art of Ajanta Caves	Nature study in pencil setting
8	NOVEMBER	Unit- III Temple sculptures bronze and artistic specs of Indo Islamic architecture	Artistic aspects of Indian Temple sculptures	Nature study in colour

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT – FINE ARTS**

9	DECEMBER	6th century AD to 13th century ad	Indian bronze sculptures	Painting composition
10	JANUAURY	". "	Some artistic aspects of Indo Islamic architectures	Painting composition
11	FEBRUARY	Practice	Practice model question paper 1 and 2	Portfolio assignment
12	MARCH	Practice	Model question paper 3	

EXAMINATION WISE- SYLLABUS BREAK UP
SESSION- (2024-25)

S.NO.	NAME OF EXAM	SYLLABUS
1	**PT-I**	Unit-I
2	**PT-II**	Unit-II
3	**Half yearly exam**	Unit- I & II
4	**PT-III**	Unit- III
5	**Annual exam**	Unit-I to III

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT - PHYSICAL EDUCATION**

S.NO.	MONTH	TOPIC/CHAPTER	SUB-TOPIC	ACTIVITY
1	APRIL	**CHANGING TREAND & CAREER IN PHYSICAL EDUCATION**	● Concept, Aims & Objectives of Physical Education ● Changing Trends in Sports- playing surface, wearable gears and sports equipment, technological advancements ● Career Options in Physical Education ● Khelo-India and Fit-India Program	**TYPES OF CARRIOR OPTIONS**
2	MAY	**OLYMPISM** **SUMMER BREAK**	● Ancient and Modern Olympics ● Olympism – Concept and Olympics Values (Excellence, Friendship & Respect) ● Olympics - Symbols, Motto, Flag, Oath, and Anthem ● Olympic Movement Structure - IOC, NOC, IFS, Other members	
3	JUNE	**SUMMER BREAK**		
4	JULY	**YOGA**	● Meaning & Importance of Yoga ● Introduction to Ashtanga Yoga ● Introduction to Yogic Kriyas (Shat Karma)	PRATICAL

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT - PHYSICAL EDUCATION**

5	AUGUST	**PHYSICAL EDUCATION & SPORTS FOR CWSN, PHYSICAL FITNESS, HEALTH & WELLNESS**	● Concept of Disability and Disorder ● Types of Disability, its causes & nature (Intellectual disability, Physical disability) ● Aim & Objective of Adaptive Physical Education ● Role of various professionals for children with special needs (Counsellor, Occupational Therapist, Physiotherapist, Physical EducationTeacher, Speech Therapist & Special Educator)	**TOGETHERNESS**
		PHYSICAL FITNESS, HEALTH & EVALUATION	● Meaning and Importance of Wellness, Health and Physical Fitness ● Components/Dimensions of Wellness, Health and Physical Fitness ● Traditional Sports & Regional Games for promoting wellness	

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT - PHYSICAL EDUCATION**

6	SEPTEMBER	**REVISION & HALF YEARLY EXAMINATION**		
7	OCTOBER	**TEST , MEASURMENT & EVALUATION** **FUNDAMENTAIL OF ANATOMY, PHYSIOLOGY IN SPORTS**	● Concept of Test, Measurement & Evaluation in Physical Education & sports. ● Classification of Test in Physical Education and Sports. ● Test administration guidelines in physical education and sports ● Definition and Importance of Anatomy and Physiology in exercise and sports ● Functions of Skeletal system, classification of bone and types of joints. ● Function and Structure of Circulatory system and heart. ● Function and Structure of Respiratory system.	

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT - PHYSICAL EDUCATION**

8	NOVEMBER	**FUNDAMENT ALS OF KINESIOLOGY AND BIOMMECHANICS IN SPORTS**	● Definition and Importance of Kinesiology and Biomechanics in sports ● Principles of Biomechanics Types of Body Movements - Flexion, Extension, Abduction, Adduction, Rotation, Circumduction, Supination & Pronation ● Axis and Planes – Concept and its application in body movements	
9	DECEMBER	**PSYCHOLOGY & SPORTS** REVISION OF EVALUATION-2	● Definition & Importance of Psychology in Physical Education & Sports ● Adolescent Problems & Their Management ● Team Cohesion and Sports	

MONTHLY SYLLABUS BREAKUP-SESSION- (2024-25)
CLASS – XI **SUBJECT - PHYSICAL EDUCATION**

10	JANUAURY	TRAINNING & DOPING IN SPORTS	• Concept and Principles of Sports Training • Training Load: Over Load, Adaptation, and Recovery • Concept of Doping and its disadvantages	
11	FEBRUARY	REVISION OF EVALUATION-3	PRATICAL	
12	MARCH	EVALUATION-3		

EXAMINATION WISE- SYLLABUS BREAK UP
SESSION- (2024-25)

S.NO.	NAME OF EXAM	SYLLABUS
1	WEEKLY REVIEW -1	UNIT 1 & 2
2	HALF YEARLY EXAMINATION	UNIT 1,2,3,4,5,& 6
3	WEEKLY REVIEW -2	UNIT- 7& 8
4	ANNUAL EXAMINATION	UNIT- 1,2,3,4,5,6,7,8,9,&10