



Doon Public School

A New Generation Sr. Sec. School | Affiliated to CBSE
Sector 21, Panchkula - 134 112 (Haryana)

Class- XI (Science) Syllabus for the Session 2024-25 English Core

Book Prescribed: NCERT				
	Months	Content	Learning Outcomes	
TERM-I	May	The Portrait of a Lady (Hornbill)	<ul style="list-style-type: none"> To learn new words and phrases enriching vocabulary. To develop respect for the grandparents and strengthen grandchild and grandparent relationship. 	
		Poem- A Photograph (Poem)	<ul style="list-style-type: none"> To encourage the students to appreciate the poetry and students would be able to find out poetic devices used in the poem. They would be able to draw a comparative study between human life and nature. 	
		The Summer of the Beautiful White Horse (Snapshots)	<ul style="list-style-type: none"> To facilitate an attitude to become honest and trustworthy in thought and action, responsible cooperative, understanding and tolerance. Students would be able to comprehend the irony hidden in the story. 	
		Advertisement Writing, Note Making, Integrated Grammar	<ul style="list-style-type: none"> To develop skill of note making and finding key words in the given passage. Students will be able to make notes of the given text. 	
	June	Speech Writing	<ul style="list-style-type: none"> To develop writing skills. To enable the students to write speech with a proper format. 	
		SUMMER BREAK		
	July	We are not Afraid to Die (Prose)	<ul style="list-style-type: none"> The students would be able to enjoy the text and appreciate the style of writing. They would be able to inculcate the values of determination and will power 	
		The Laburnum Top (Poem)	<ul style="list-style-type: none"> To develop aesthetic sense amongst students and appreciate poetic devices used by the poet. To interpret the poem by relating the theme to the present-day context and respecting Mother Nature. 	
	August	PERIODIC TEST-I		
		Discovering Tut (Prose)	<ul style="list-style-type: none"> To understand, enjoy and appreciate a factual text, understand the meaning and usage of phrases used in the text. To appreciate the rich and mysterious history of the royal kings. 	
		Poem- Voice of the Rain	<ul style="list-style-type: none"> To develop aesthetic sense amongst students and appreciate poetic devices used by the poet. To interpret the poem by relating the theme to the present-day context and respecting Mother Nature. 	
		Poem-The Childhood	<ul style="list-style-type: none"> To develop aesthetic sense amongst students and appreciate poetic devices used by the poet. To be able to differentiate between innocence and maturity. 	
		The Adventure (Hornbill)	<ul style="list-style-type: none"> To introduce the students to the genre of science fiction. To facilitate the students in making connections between similar situations in different storylines/life experiences. 	
		*Integrated Grammar	<ul style="list-style-type: none"> To understand correct usage of grammar. To be able to comprehend and use grammatical organization for quantifying and sentence completion. 	

		Debate Writing	<ul style="list-style-type: none"> To be able to frame speech & debate. To learn how to defend and put arguments for the given topic.
	September	REVISION & TERM-I EXAMINATION	
TERM-II	October & November	Mother's Day (Snapshots)	<ul style="list-style-type: none"> Imbibe values like care and concern, empathy, compassion, respect for elders, belongingness and tolerance. Understand the struggles and sacrifices of parents and to draw inspiration from them.
		Silk Road (Hornbill)	<ul style="list-style-type: none"> To develop students' interest in religious places and importance of Mount Kailash & Kora. To identify the important of the Silk Road and how it came into existence.
		Poem- Father to Son (Hornbill)	<ul style="list-style-type: none"> To develop students' interest in poetry and find out the poetic devices. To cultivate interest and appreciate poetry and develop the ability of reading with proper stress and intonation.
		Letter Writing (Business letters)	<ul style="list-style-type: none"> To be able to write general letters. To exchange the ideas and opinions.
		Poster Writing	<ul style="list-style-type: none"> To express ideas aesthetically and relevantly with definition in purpose, expressions, grammar usage, format usage, relevant vocabulary. To be able to create effective poster.
	December	PERIODIC TEST-II	
		WINTER BREAK	
	January	Birth (Snapshots)	<ul style="list-style-type: none"> To be able to enjoy literature and know about the various challenges faced in medical profession.
		Poem- The Tale of Melon City (Snapshots)	<ul style="list-style-type: none"> To develop students' interest in poetry and find out the poetic devices. To inculcate values like social connection, trust, co-operation, confidence, faith, respect and integrity, ability to fight against all odds.
	February & March	REVISION, PRACTICALS & TERM-II EXAMINATION	

Physics

Book Prescribed: NCERT			
	Months	Content	Learning Outcomes
TERM - I	May	Ch- Units and Measurements	<ul style="list-style-type: none"> To define fundamental quantities and derived quantities and their units. To understand the use of measuring instruments viz. Vernier callipers, screw gauge. To apply dimensional analysis on checking the accuracy of an equation relating various physical quantities and to derive relation between various physical quantities. To understand the various mathematical operations with regards to significant figures.
		Ch- Motion in a Straight Line	<ul style="list-style-type: none"> To understand the concept of distance, displacement, velocity and acceleration. To distinguish between average and instantaneous quantities. To plot distance-time and velocity- time graph. To apply equations of motion and to solve the numerical examples.

	Ch- Motion in Plane	<ul style="list-style-type: none"> To determine the sum of vectors using triangle law of addition and parallelogram law of addition. To define equilibrium of vectors. To define projectile, projectile motion and trajectory of projectile. To derive the relation for time of flight, maximum height and horizontal range of a projectile. 	
June	Ch- Laws of Motion	<ul style="list-style-type: none"> To find the difference between banking of road and level road and apply the concept of banking of road to real life situations. To calculate angle of banking in case of banked road. To apply the concept of friction, coefficient of friction in day to day life. 	
	SUMMER BREAK		
July	Ch- Work, Energy and Power	<ul style="list-style-type: none"> To understand the basic concept of work done along with its mathematical analysis and classification of work. To understand the concept of mechanical energy, different forms of energy and its conservation with necessary mathematical analysis. To develop problem solving on the concept of power, energy and work. 	
	Ch- Gravitation	<ul style="list-style-type: none"> To recall the Newton's law of gravitation. To know about variation in gravitational acceleration with height and depth from surface of the earth. To compare and contrast the geostationary and polar orbits of satellites. To know about weightlessness in satellites and to make them understand Kepler's laws of planetary motion. 	
	Ch- System of Particles and Rotational Motion	<ul style="list-style-type: none"> To apply vector product to define and calculate angular momentum and torque. To define moment of inertia and calculate moment of inertia for various rigid bodies by applying theorem of parallel and perpendicular axes. To state and prove law of conservation of angular momentum. To derive expression for rotational kinetic energy of a rigid body and explain rolling motion for a rigid body. 	
August	PERIODIC TEST-I		
	Ch- Mechanical Properties of Solids	<ul style="list-style-type: none"> Learners will be able to understand practicality of different types of Elastic modulli and relation between stress and strain. 	
	Ch- Mechanical Properties of Fluids	<ul style="list-style-type: none"> Learners will be able to understand practicality of fluid dynamics (Pascal's Law, Bernoulli's theorem, Magnus Effect) in real life. Learners will be able to understand concept of surface tension and surface energy and will be able to relate it with a daily life. 	
September	REVISION & TERM-I EXAMINATION		
Term II	October & November	Ch- Thermal Properties of Matter	<ul style="list-style-type: none"> Learners will be able to understand the different methods of heat transfer, concept of thermal expansion and Laws of cooling. To understand about thermal expansion of solids, liquids, and gases and explore about anomalous expansion of water and specific heat capacity.
		Ch- Thermodynamics	<ul style="list-style-type: none"> To evaluate thermodynamic properties of pure substances with special emphasis on fluids. To use various PVT equations-of-state and heat capacities to evaluate thermodynamic properties. To understand the interrelationships between different thermodynamic properties and become familiar with the calculus that establishes these interrelationships.

		Ch- Kinetic Theory	<ul style="list-style-type: none"> To evaluate thermodynamic properties of pure substances with special emphasis on fluids. To be able to calculate heat transfer rates associated with processes involving phase changes and work done by the system or on the system and to calculate standard heats of reaction. To be able to use various sources of thermodynamic data and properties, including graphs and tables and to use graphs of thermodynamic properties to develop an intuition for the variation of these properties during various processes.
		Ch- Oscillations	<ul style="list-style-type: none"> To explain, interpret and use the terms: oscillation, simple harmonic motion (SHM), amplitude, period, frequency, angular frequency, phase, initial phase, free oscillation, damped oscillation, forced oscillation. To explain free, damped and forced oscillations in terms of forces and energy transfers. To describe the important properties of SHM and explain how SHMs can be combined to give more general oscillations.
	December	PERIODIC TEST-II	
		WINTER BREAK	
	January	Ch- Waves	<ul style="list-style-type: none"> To understand the concept of waves and its types. To know about the different terms related to waves and to differentiate between transverse and longitudinal waves. To derive the relation of displacement in progressive waves and understand the concept of superposition waves.
	February & March	REVISION, PRACTICALS & TERM-II EXAMINATION	

Chemistry

Book Prescribed: NCERT

	Months	Content	Learning Outcomes
Term -I	May	Ch- Some Basic Concepts of Chemistry	<ul style="list-style-type: none"> Student will be able to distinction between qualitative and quantitative chemical analysis How to use the scientific method to create, test, and evaluate Students will gain and understand the fundamental properties of atoms, molecules, and the various states of matter Calculations of chemical equations to determine the quantities of reactants and products.
		Ch- Structure Of Atom	<ul style="list-style-type: none"> Students will be able to describe fundamental properties of structure of atom Explain the Thomson model, Rutherford model and Bohr model Understand the photoelectric effect, black body radiations, hydrogen spectrum Know about quantum numbers.
		Ch- Classification Of Elements And Periodicity In Properties	<ul style="list-style-type: none"> Students will be able to define periodic table and learn different elements of it Understand blocks, shells sub shells of periodic table Cherish with the essentials of Mendeleev and Modern periodic table Classify the elements into different blocks viz s,p,d,f and get detailed Electronegativity, ionic and atomic radii and their variations in periodic table.

	June	Ch -Chemical Bonding and Molecular structure	<ul style="list-style-type: none"> Students will be able to understand the different approaches to types of chemical bonding Explain the rules to write the Lewis structure of simple molecules Calculate the formal charge of atoms present in the Lewis structures Understand the concept of resonance
	SUMMER BREAK		
	July	Ch -Chemical Bonding and Molecular structure	<ul style="list-style-type: none"> Describe the VSEPR theory and its significance in predicting the anomalous change in geometry of molecules due to different kinds of electronic interaction
	August	Ch- Redox reaction	<ul style="list-style-type: none"> The students will be able to explain Electronic concept of oxidation and reduction Define Basic principles involved in redox reactions Know Mechanism of electron transfer involved in redox reactions Calculation of oxidation numbers in terms of electron transfer Differentiation of reactions in terms of redox reaction Balancing of redox reactions using <ol style="list-style-type: none"> oxidation number method half reaction method Apply Electrochemistry of redox reactions as a tool for future knowledge
	September	REVISION & TERM-I EXAMINATION	
TERM-II		Ch-Organic chemistry: some basic principles and techniques	<ul style="list-style-type: none"> The students will be able Interpret the structure of molecules in different ways Classify and give the nomenclature of organic compounds in trivial and IUPAC system. Explain about different types of isomerism exhibited by organic compounds Bring out the effect of electronic displacements on structure and reactivity of organic compounds Understand the methods of purification of organic compounds Explain in detail the qualitative and quantitative aspects of organic
	October & November	Ch-Hydrocarbon	<p>The students will be able to:</p> <ul style="list-style-type: none"> Name the different kind of hydrocarbons according to common and IUPAC nomenclature Identify and write the structures of isomers of aliphatic and aromatic hydrocarbons Know different form arise due to free rotation of C-C bond in alkane(conformers) Discuss on Preparations and Properties of alkanes, alkenes, alkynes and arenes Define Geometrical isomers(cis-trans) arising due to the restricted rotation about C=C Explain resonance and extra stability of benzene
	December	Ch-Chemical Thermodynamics	<ul style="list-style-type: none"> The students will be able to know he concept of System and surroundings in thermodynamics and their types Explain First law of Thermodynamics Know about the thermodynamics in terms of internal energy, work and heat. Relationship between internal energy and enthalpy Different types of enthalpy changes involved in terms of Hess's law
	PERIODIC TEST-II		
	January	WINTER BREAK	

		Ch- Equilibrium	<ul style="list-style-type: none"> The students will be able to. Understand the equilibrium existing between different states of matter Explain the characteristics of chemical equilibrium and equilibrium constant Bring out the relationship between equilibrium constants at different conditions Classify substances as acids and bases on the basis of different theories Explain different important concepts of equilibrium viz., pH scale, ionic product of water.
	February & March	REVISION, PRACTICALS & TERM-II EXAMINATION	

Biology

Books prescribed- NCE`RT				
	Months	Content	Learning Outcomes	
Term -I	May	Ch 1- The living world	<ul style="list-style-type: none"> Students are able to explain the concept of Binomial nomenclature and taxonomical hierarchy. 	
		Ch 2- Biological Classification	<ul style="list-style-type: none"> Students are able to elaborate the salient features of different kingdoms like Monera, Protista, Fungi and difference between Virus, viroid, prions and lichens 	
		Ch 3- Plant kingdom	<ul style="list-style-type: none"> Students are able to classify plant kingdom into algae, pteridophytes, bryophytes, gymnosperms and angiosperms. 	
		Ch 4- Animal Kingdom	<ul style="list-style-type: none"> Students are able to classify different groups of animals of Animal kingdom into their respective phylum and classes. 	
	June	Ch 5- Morphology of flowering Plants	<ul style="list-style-type: none"> Students are able to illustrate the morphological features of plants, and explain venation, inflorescence, phyllotaxy, placentation and description of family Solanaceae. 	
		SUMMER BREAK		
	July	Ch 6- Anatomy of Flowering Plants	<ul style="list-style-type: none"> Students are able to differentiate and identify between the transverse section of dicot and monocot roots, stems and leaves. 	
		Ch 7- Structural Organisation in Animals	<ul style="list-style-type: none"> Students are able to explain the morphology, anatomy and different systems of Frog. 	
	August	PERIODIC TEST-I		
		Ch 8- The unit of life	<ul style="list-style-type: none"> Students are able to differentiate between Prokaryotic & Eukaryotic cells, animal, plant cell and its cell organelles and its functions in detail. 	
Ch 9- Biomolecules		<ul style="list-style-type: none"> Students are able to explain chemical constituents of living cells and working of enzymes and factors affecting enzyme activity. 		
Ch 10- Cell Cycle and Cell Division		<ul style="list-style-type: none"> Students are able to explain the Cell cycle- mitosis, meiosis and their significance. 		
	September	REVISION & TERM-I EXAMINATION		
TERM-II	October & November	Ch 11- Photosynthesis in Higher plants	<ul style="list-style-type: none"> Students are able to elaborate cyclic and non-cyclic pathways, The Calvin cycle, The Hatch and Slack pathway, factors affecting photosynthesis. 	
		Ch 12- Respiration in Plants	<ul style="list-style-type: none"> Students are able to explain the processes of Glycolysis, TCA cycle, ETS pathway, amphibolic pathways and respiratory quotient in detail. 	
		Ch 13- Plant Growth and Development	<ul style="list-style-type: none"> Students are able to explain the phases of plant growth, differentiation, dedifferentiation and re-differentiation and all the plant growth regulators and their functions in detail. 	

	Ch 14- Breathing & Exchange of Gases	<ul style="list-style-type: none"> Students are able to explain the process of exchange of gases, transport of gases, regulation of respiration, respiratory volume and respiratory disorders.
	Ch 15- Body Fluids and Circulation	<ul style="list-style-type: none"> Students are able to explain the circulation of blood and its formed elements, double circulation, ECG, cardiac cycle and respiratory disorders in detail.
	Ch 16- Excretory products and their elimination	<ul style="list-style-type: none"> Students are able to explain excretion- urine formation, osmoregulation, regulation of kidney function- renin-angiotensin, ANF, ADH and diabetes insipidus; dialysis and disorders.
December	PERIODIC TEST-II	
	Ch 17- Locomotion and Movement	<ul style="list-style-type: none"> Students are able to elaborate the types of muscles, mechanism of muscle contraction, skeletal system and disorders of muscular and skeletal system.
January	WINTER BREAK	
	Ch 18- Neural Control & Co-ordination	<ul style="list-style-type: none"> Students are able to elaborate the structure and types of neurons, conduction and transmission of nerve impulses, central nervous system in detail.
	Ch 19- Chemical Co-ordination and Integration	<ul style="list-style-type: none"> Students are able to differentiate between different endocrine glands & explain the function of their hormones, mechanism of hormone action and hypo-activity and hyperactivity and related disorders.
February & March	REVISION, PRACTICALS AND TERM- II EXAMINATION	

Mathematics (041)

Book Prescribed: NCERT			
	Months	Content	Learning Outcomes
Term -I	May	Ch-Complex Numbers and Quadratic Equations	<ul style="list-style-type: none"> To define 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.
		Ch- Sequences and Series	<ul style="list-style-type: none"> The students will be able to know about 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.
	June	Ch- Trigonometric Functions	<ul style="list-style-type: none"> The students will be able to understand about 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 $\sin^2x + \cos^2x = 1$, 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. To find domain and range of Trigonometric functions and their graphs. Simple applications. Identities related to $\sin 2x$, $\cos 2x$, $\tan 2x$, $\sin 3x$, $\cos 3x$ and $\tan 3x$
		SUMMER BREAK	
	July	Ch- Straight Lines	<ul style="list-style-type: none"> To learn 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.
Ch- Statistics		<ul style="list-style-type: none"> To find Measures of Dispersion: Range, Mean deviation, variance and standard deviation of ungrouped/grouped data. 	

	August	PERIODIC TEST-I		
		Ch- Limits & Derivatives	<ul style="list-style-type: none"> 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. 	
		Ch- Sets	<ul style="list-style-type: none"> To define 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. To draw Venn diagrams. Union and Intersection of sets. To explain Difference of sets. Complement of a set. Properties of Complement. 	
	September	REVISION & TERM-I EXAMINATION		
TERM-II	October & November	Ch- Relations and Functions	<ul style="list-style-type: none"> To define 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 $R \times R \times R$). To define a relation, draw pictorial diagrams, domain, co-domain and range of a relation. To define a 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. 	
		Ch- Permutations and Combinations	<ul style="list-style-type: none"> To make them understand Fundamental principle of counting. Factorial n. ($n!$) Permutations and combinations, Derivation of formulae for nPr and nCr and their connections, simple applications. 	
		Ch- Binomial Theorem	<ul style="list-style-type: none"> To make them understand Historical perspective, statement and proof of the binomial theorem for positive integral indices. Pascal's triangle, simple applications. 	
		Ch- Probability	<ul style="list-style-type: none"> To explain 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. 	
		Ch- Linear Inequalities	<ul style="list-style-type: none"> To understand Linear inequalities. Algebraic solutions of linear inequalities in one variable and their representation on the number line. To find Solution of linear inequalities graphically. 	
	December	PERIODIC TEST-II		
	January	WINTER BREAK		
		Ch- Conic Sections	<ul style="list-style-type: none"> 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. 	
		Ch- Introduction to Three Dimensional Geometry.	<p>Coordinate axes and coordinate planes in three dimensions. Coordinates of a point. Distance between two points.</p>	
	February & March	REVISION, PRACTICALS & TERM-II EXAMINATION		

Computer Science

Book Prescribed			
Computer Science with Python (Sultan Chand Pub.)			
	Months	Content	Learning Outcomes
Term-I	May	Ch- Computer System Organization	<ul style="list-style-type: none"> To learn the basic computer organisation. To know about the types of software: System software, Operating System (OS), functions of the operating system, OS user interface and different types of applications.
		Ch - Data Representation and Boolean Logic	<ul style="list-style-type: none"> To learn and practices of Boolean logic, truth tables and De Morgan's laws, Logic circuits. To learn about the Number System and conversion between number systems Encoding Schemes: ASCII, ISCII, and Unicode (UTF8, UTF32)
		Practical of sequential programming.	<ul style="list-style-type: none"> Students will do programs of sequential programming and learn evaluation of an expression accepting data as input from the console and displaying output.
	June	Ch- Getting Started with Python.	<ul style="list-style-type: none"> Students will learn the basics of Python programming and problem solving approach, algorithm, Flowcharts etc.
	June	SUMMER VACATION	
	July	Ch- Python Programming Fundamentals	<ul style="list-style-type: none"> To learn about the data types, operators, tokens, bugging, debugging the program.
		Ch- Conditional and Looping Construct	<ul style="list-style-type: none"> To learn and practices the conditional statements: if, if-else, if-elif-else
	August	PERIODIC TEST-I	
Ch- Conditional and Looping Construct		<ul style="list-style-type: none"> To learn the Iterative Statement: for loop, while loop, break and continue. Students will do programs of Control statement and Looping Statements. 	
September	REVISION & TERM-I EXAMINATION		
TERM-II	October & November	Ch – Strings in Python	<ul style="list-style-type: none"> To learn about the strings in python, operations on string, traversing a string using loops, built-in functions
		Ch – List in Python	<ul style="list-style-type: none"> To learn about the lists in python, indexing, operations and built-in functions of list.
		Ch –Tuples and Dictionary	<ul style="list-style-type: none"> To learn about the tuples on python, operations, built-in functions/methods To learn about the dictionary, accessing the dictionary using keys, built-in functions of the dictionary.
	December	PERIODIC TEST-II	
	January	WINTER BREAK	
		Ch –Introduction to Python Modules	<ul style="list-style-type: none"> To learn the creation of modules, functions of python.
		Ch- Society , law & Ethics	<ul style="list-style-type: none"> To learn the rules to use the social media, cybercrime and how to deal with the cybercrime. To learn the IPR and related terms, violation of IPR. To learn more about the open source and open data
Ch- Cyber Safety		<ul style="list-style-type: none"> To learn about the cyber crime, cyber safety and cyber forensics. To learn about the malware, viruses, Trojans, adware, E-waste management: IT Act for cyber crime, technology and society. 	
February & March	REVISION, PRACTICALS & TERM-II EXAMINATION		

Physical Education

Book Prescribed: SP Book				
	Months	Content	Learning Outcomes	
TERM-I	May	Ch- (Changing Trends & Career in Physical Education)	<ul style="list-style-type: none"> Students will come to know about career options in physical education and also about Khelo India & Fit India. Students will able to know about physical development. 	
		Ch- (Olympism Value Education)	<ul style="list-style-type: none"> Students will come to know about ancient & modern Olympics and concept of Olympism. Students will come to know about Olympic Symbols, flag and motto. 	
	June	SUMMER BREAK		
	July	Ch- (Yoga)	<ul style="list-style-type: none"> It will help to understand about the importance of Yoga in our life. Students will able to know about different yoga asanas. 	
		Ch- (Physical Education & Sports for CWSN)	<ul style="list-style-type: none"> It will help to understand about aim & objective of adaptive physical education. Students will able to know about the role of various professionals for CWSN. 	
	August	PERIODIC TEST-I		
Ch- (Physical Fitness, Wellness and Lifestyle)		<ul style="list-style-type: none"> Students will come to know about Health related fitness. Students will able to know about Traditional sports and regional games. 		
September	REVISION & TERM-I EXAMINATION			
TERM-II	October & November	Ch- (Test, Measurement and Evaluation)	<ul style="list-style-type: none"> It will help to learn to about BMI. Students will able to know about the concept of Test, Measurement and Evaluation in physical education and sports. 	
		Ch- (Fundamentals of Anatomy, Physiology in sports)	<ul style="list-style-type: none"> It will help to understand about human body systems. Students will able to know about the function and structure of Circulatory system and Respiratory system. 	
	December	PERIODIC TEST-II		
	January	WINTER BREAK		
		Ch- (Fundamentals of Kinesiology and Biomechanics in sports)	<ul style="list-style-type: none"> It will help to understand about how kinesiology and biomechanics helps to improve sports techniques. Students will able to know about the different types of body movements 	
		Ch- (Psychology & Sports)	<ul style="list-style-type: none"> Students will come to know about the importance of sports. Students will able to know the adolescent problems and their management. 	
Ch- (Training & Dopping in Sports)		<ul style="list-style-type: none"> It will help to understand about the prohibited substances in sports. Students will able to know about sports training. 		
February & March	REVISION, PRACTICALS & TERM-II EXAMINATION			

Painting

Book Prescribed: NCERT			
	Months	Content	Learning Outcomes
TERM-I	May	Ch- Pre-Historic rock paintings	<ul style="list-style-type: none"> To demonstrate different values such as cooperation, team work, discipline & respect for nature & animal. To understand the various style & moods of art expressions from different parts of India.
		Ch- Art of Indus Valley	<ul style="list-style-type: none"> To explain the beauty of man-made designs of sculptures.
	June	SUMMER BREAK	
	July	Ch- Buddhist, Jain and Hindu Art	<ul style="list-style-type: none"> To develop skill of using drawing & painting material (surface tools & equipment etc.) effectively. To develop their skills to draw & paint these observations.
	August	PERIODIC TEST-I	
Ch- Buddhist, Jain and Hindu Art		<ul style="list-style-type: none"> To develop skill of using drawing & painting material (surface tools & equipment's etc.) effectively. To develop their skills to draw & paint these observations. 	
September	REVISION & TERM-I EXAMINATION		
TERM-II	October & November	Ch- Temple sculpture, Bronzes and Artistic aspects of Indo-Islamic architecture	<ul style="list-style-type: none"> To express them effectively in drawing & painting to express the different feelings & moods of life and nature in lines forms & colours
	December	PERIODIC TEST-II	
	January	WINTER BREAK	
	February & March	REVISION OF WHOLE SYLLABUS	
		REVISION, PRACTICALS & TERM-II EXAMINATION	

Hindustani Music Vocal

Book Prescribed: NCERT			
	Months	Content	Learning Outcomes
TERM-I	May	Ch - Brief study of the following: Nada, Swar Shruti, Saptak, Thaata, Jaati, Laya, Tala.	<ul style="list-style-type: none"> Students will be able to understand basic terms of classical music.
		Ch - Description of prescribed taal along with taal notation with thah, dugun and chaugun of Teentaal with hand beats.	<ul style="list-style-type: none"> Students will be able to understand the concept of rhythm.

		Ch - Writing in notation the composition of prescribed raag Bhairavi (dhrut khayal) Devotional song.	<ul style="list-style-type: none"> Students will be able to learn sudh komal tivra swaras, according to their ragas.
		Ch- Brief History of Dhrupad, Khayal & Tarana	<ul style="list-style-type: none"> Students will be able to know the history of indian classical music.
	June	Ch- Lifesketch and contribution of Tansen	<ul style="list-style-type: none"> Students will be able to understand the roots of indian classical musicians and the importance of their contribution towards classical music.
		Ch - Brief study of musical element in Natyashastra	<ul style="list-style-type: none"> Students will be learn about the historical aspects of indian classical music.
	SUMMER BREAK		
	July	Ch- Writing in notation the composition of prescribed Raag Bhimplasi (Vilambit & Drut Khayal)	<ul style="list-style-type: none"> Students will be able to learn Shudh and Komal Swaras according to the raga.
		Ch - Discription of prescribed taal along with taal notation with thah, dugun and chaugun of Ektaal with hand beats.	<ul style="list-style-type: none"> Student will be able to learn the concept of rhythm.
	August	PERIODIC TEST-I	
		Ch - Knowledge of the structure of Tanpura.	<ul style="list-style-type: none"> Students will be able to learn the basic knowledge of Tanpura.
		Ch- Discription of prescribed taal along with taal notation with thah, Dugun,tigun and chaugun of Chartaal with hand beats.	<ul style="list-style-type: none"> Students will be able to understand the concept of rhythm and how to show rhythm on hands.
September	REVISION & TERM-I EXAMINATION		
TERM-II	October & November	Ch- Critical study of prescribed Raag Bihag along with recognising phrases of swaras and elaborating them & writing in notation the composition of Raag Bihag (Dhrut khayal).	<ul style="list-style-type: none"> Students will be able to recognise the raag with the help of swaras.
		Ch - Tunning of Tanpura	<ul style="list-style-type: none"> Student will be learn the basic knowledge of tanpura.
		Ch - Brief study of the following- Margi-Desi Sangeet, Raga	<ul style="list-style-type: none"> Students will be able to understand basic terms of music.
		Ch - Life sketch & contribution of V.N.Bhatkhande & V.D. Paluskar	<ul style="list-style-type: none"> Students will be able to understand the roots of indian classical musicians and the importance of their contribution towards classical music.
December	PERIODIC TEST-II		
WINTER BREAK			
	January	Ch- Critical study of prescribed Raag along with recognising Ragas from phrases of swaras & elaborating them(Bhimplasi, Bhairavi)	<ul style="list-style-type: none"> Students will be able to recognise the raag with the help of swaras.

February & March	REVISION, PRACTICALS & TERM-II EXAMINATION
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Early Childhood Care and Education

Book Prescribed: ECCE Resource			
Months	Content	Learning Outcomes	
TERM-I	May	Ch-Communication Skills III	<ul style="list-style-type: none"> To understand the various communication models. To develop effective verbal communication skills, including clarity, coherence, and appropriate language use.
		Ch- Introduction to Early Childhood Care & Education	<ul style="list-style-type: none"> To understand about the context of the child. Recognize the responsibilities and roles of early childhood educators in providing a nurturing learning environment.
	June	SUMMER BREAK	
	July	Ch- Foundations of Child Development	<ul style="list-style-type: none"> Comprehend major developmental theories. To identify and describe the various domains of child development, including physical, cognitive, social, and emotional development.
		Ch- Self-Management Skills III	<ul style="list-style-type: none"> To learn to set smart (specific, measurable, achievable, relevant, time-bound) goals. To enhance decision-making skills by evaluating options & considering consequences.
	August	PERIODIC TEST-I	
		Ch- Nutrition & Health Needs of the Child	<ul style="list-style-type: none"> To understand the nutritional needs of children at different stages of development. To identify common nutritional deficiencies in children, their causes, symptoms, and preventive measures.
	September	REVISION & TERM-I EXAMINATION	
TERM-II	October & November	Ch- Various Pedagogical Approaches & Holistic Development Activities for ECCE	<ul style="list-style-type: none"> To know about care & practices for children from (birth to 6 months) (7 months to 1 year) and (1 year to 3 year) To demonstrate an understanding of key pedagogical approaches.
		Ch- Inside-Outside Care & Learning Environment	<ul style="list-style-type: none"> To learn about the environment for health, safety, stimulation and learning. Identify the key components and characteristics of effective indoor and outdoor learning spaces.
		Ch- ICT Skills III	<ul style="list-style-type: none"> To develop digital literacy and data management. To understand basic digital concepts.
		Ch- Entrepreneurial Skills III	<ul style="list-style-type: none"> To understand about business planning and conceptualisation. To learn about research and financial literacy.
	December	PERIODIC TEST-II	
	January	WINTER BREAK	
		Ch- Engaging With Parents & Community	<ul style="list-style-type: none"> To know about the ways of reaching out to parents & community through various methods.
		Ch- Green Skills III	<ul style="list-style-type: none"> To develop an understanding of environmental challenges To understand environmental conservation and sustainable practices.
February & March	REVISION, PRACTICALS & TERM-II EXAMINATION		

Yoga

Book Prescribed:				
	Months	Content	Learning Outcomes	
TERM-I	May	Ch- Communication Skills-III	<ul style="list-style-type: none"> Students will develop knowledge skills & judgement around human communication that facilitate their ability to work collaboratively with others. Students will come to know about the components and addressing barriers to effective communication. 	
		Ch – Introduction to Yoga and Yogic Practices-III	<ul style="list-style-type: none"> Student will develop knowledge about yoga. Students will able to know how to improve internal organs with the help of Yogic kirays. 	
	June	SUMMER BREAK		
	July	PERIODIC TEST-I		
		Ch- Self Management Skills-III	<ul style="list-style-type: none"> Helps to become a successful learner. It will help to understand about setting goals and efficiently manage time. 	
August	Ch- ICT Skills-III	<ul style="list-style-type: none"> Acknowledging the role of technologies in modern society. It will help to develop digital literacy, data management and understand basic digital concepts. 		
September	REVISION & TERM-I EXAMINATION			
TERM-II	October to November	Ch – Introduction to Yoga Texts-I	<ul style="list-style-type: none"> Students will develop knowledge about yoga. Students will able to know about different asanas. 	
		Ch – Yoga for Health Promotion-I	<ul style="list-style-type: none"> Students will develop knowledge about yogic diet. Students will able to know about asanas and their benefits. 	
	December	PERIODIC TEST-II		
	January	Ch- Entrepreneurial Skills-III	<ul style="list-style-type: none"> It will allow students to identify & create business opportunities. It will help to understand about business planning, conceptualisation, research and financial literacy. 	
		Ch- Green Skills-III	<ul style="list-style-type: none"> It will increase knowledge about the need of green skill for efficient society. It will help to develop an understanding of environmental challenges, conservation and sustainable practices. 	
February & March	REVISION, PRACTICALS & TERM-II EXAMINATION			

Library & Information Science

Book Prescribed: CBSE			
	Months	Content	Learning Outcomes
TERM-I	May	Ch -Communication Skills-III	<ul style="list-style-type: none"> To identify the different parts of a sentence. To address barriers to effective communication.
		Ch - Library, Information and Society – Role and its implications	<ul style="list-style-type: none"> To know about the purpose and role of library in the development of modern society To know about types of libraries and their role & organization of library resources: basics
		Ch - Self - Management Skills-III	<ul style="list-style-type: none"> To understand about setting goals and efficiently manage time.
	June	SUMMER BREAK	

	July	Ch- Organization of Library Resources: Basics	<ul style="list-style-type: none"> To understand about library classification. To understand about library cataloguing.
	August	PERIODIC TEST-I	
		Ch - Reference and Information Sources	<ul style="list-style-type: none"> To understand about provide additional facilities for higher learning. To research and dissemination of knowledge.
	September	REVISION & TERM-I EXAMINATION	
TERM-II	October & November	Ch- ICT Skills-III	<ul style="list-style-type: none"> To develop digital literacy, data management. To understand basic digital concepts.
		Ch - Computer Applications in Libraries: Basics	<ul style="list-style-type: none"> To access to a range of electronic information resources. To manage materials (books, journals, videos, and other media) held in particular collections.
		Ch - Entrepreneurial Skills-III	<ul style="list-style-type: none"> To understand about business, planning, conceptualisation, research and financial literacy.
	December	PERIODIC TEST-II	
	January	Ch - Green Skills-III	<ul style="list-style-type: none"> To develop an understanding of environmental challenges, conservation and sustainable practices.
	February & March	REVISION, PRACTICALS & TERM-II EXAMINATION	

Marketing

Book Prescribed: CBSE Notes			
	Months	Content	Learning Outcomes
TERM-I	May	Ch - Introduction to Marketing	<ul style="list-style-type: none"> To understand the concept, scope and objectives of marketing. Explain marketing philosophies and represent what can be marketed. To differentiate between Selling and Marketing.
		Ch - Communication Skills	<ul style="list-style-type: none"> The students will be able to know about the components of communication & addressing barriers to effective communication.
		Ch- Marketing Environment	<ul style="list-style-type: none"> To understand the micro, macro, internal and external factors affecting the business. To describe the meaning of ETOP and environmental scanning.
	June	SUMMER BREAK	
	July	Ch- Marketing Environment	<ul style="list-style-type: none"> To understand the micro, macro, internal and external factors affecting the business. To describe the meaning of ETOP and environmental scanning.
		Ch- Self Management Skills - III	<ul style="list-style-type: none"> To understand about setting goals and efficiently manage time. To understand the meaning and importance of Self-management, develop self-confidence and positive thinking.
	August	PERIODIC TEST-I	
Ch- Marketing Segmentation, Targeting and Positioning		<ul style="list-style-type: none"> The students will be able to understand the concept, basis and importance of segmentation, targeting and positioning. 	
	September	REVISION & TERM-I EXAMINATION	
TERM-II	October & November	Ch- ICT (Information and Communication Technology) - III	<ul style="list-style-type: none"> Understand the importance of ICT at workforce and at home. Enable the use of ICT tools.
		Ch- Fundamentals of marketing mix	<ul style="list-style-type: none"> Give introduction and characteristics of marketing mix. Understand the concept of 4Ps & 4Cs and factors governing these decisions.
		Ch- Consumer Behaviour	<ul style="list-style-type: none"> Discuss about the meaning importance and stages of consumer behaviour. To understand the factors governing the consumer behaviour
	December	PERIODIC TEST-II WINTER BREAK	

	January	Ch- Entrepreneurial Skills - III	<ul style="list-style-type: none"> To understand the meaning of Entrepreneurship, its role, characteristics of entrepreneur.
		Ch- Green Skills - III	<ul style="list-style-type: none"> The students will be able to acquire knowledge about resources, their uses, pollution and importance of green environment.
	February & March	REVISION, PRACTICALS & TERM-II EXAMINATION	

Applied Mathematics (241)

Book Prescribed: NCERT				
	Months	Content	Learning Outcomes	
TERM-I	May	Ch- Sets	<ul style="list-style-type: none"> Define set as well-defined collection of objects. Represent set in roster and set builder form. Identify different types of sets on the basis of number of elements in the set. Differentiate between equal set and equivalence set. Subsets Apply the concept of Venn diagram to understand the relationship between sets. Solve problems using Venn diagram. Perform operations on sets to solve practical problems. 	
		Ch- Relations	<ul style="list-style-type: none"> Explain the significance of specific arrangement of elements in a pair. Cartesian product of two sets. Find the number of elements in a Cartesian product of two sets. Express relation as a subset of Cartesian product. Find domain and range of a relation. 	
	June	Ch- Sequence & Series	<ul style="list-style-type: none"> Differentiate between sequence and series, identify arithmetic progression (AP). Establish the formulae of finding nth term and sum of n terms. Solve application problems based on AP. Find arithmetic mean (AM) of two positive numbers. Identify Geometric Progression (GP). Derive the nth term and sum of n terms of a given GP. Solve problems based on applications of GP. Find geometric mean (GM) of two positive numbers. Solve problems based on relation between AM and GM. Apply appropriate formulas of AP and GP to solve application problems. 	
		SUMMER BREAK		
	July	Ch-Straight Line	<ul style="list-style-type: none"> Find the slope and equation of line in various form. Find angle between the two lines. Find the perpendicular from a given point on a line. Find the distance between two parallel lines. 	
		Ch-Circle	<ul style="list-style-type: none"> Define a circle. Find different form of equations of a circle. Solve problems based on applications of circle. 	
	August	PERIODIC TEST-I		
		Ch - Numbers, Quantification and Numerical Applications	<ul style="list-style-type: none"> Express decimal numbers in binary system. Express binary numbers in decimal system. Relate indices and logarithm/ antilogarithm, find logarithm and antilogarithms of given numbers. Enlist the laws and properties of logarithms. Apply laws of logarithm. Use logarithm in different applications. determine average for a given data. Evaluate the angular value of a minute. Calculate the angle formed between two hands of a clock at given time. Calculate the time for which hands of clock need. Determine odd days in a 	

			<p>month/ year/ century. decode the day for given date. Establish the relationship between work and time . Compare the work done by the individual/ group w.r.t. time. calculate the time taken/ distance covered/ work done from the given data. Solve problems based on the surface area and volume of 2D and 3D shapes calculate the volume surface area for solid formed using two or more sheets.</p> <ul style="list-style-type: none"> • Create suitable seating plan/ draft as per given conditions (linear / circular). • Locate the position of a person in a seating arrangement.
	September	REVISION & TERM-I EXAMINATION	
TERM-II	October & November	Ch- Functions	<ul style="list-style-type: none"> • Identify dependent and independent variables. Define a function using dependent and independent variable. • Define domain, range and co-domain of a given function. • Define various types of functions. Representation of function graphically
		Ch- Limits, Continuity & Derivatives of functions	<ul style="list-style-type: none"> • Define limit of a function. Solve problems based on the algebra of limits. Define continuity of a function. • Define instantaneous rate of change. • Find the derivative of the functions. Find the derivative of function of a function.
		Ch- Permutations and Combinations	<ul style="list-style-type: none"> • Define factorial of a number. Calculate factorial of a number. Appreciate how to count without counting. Define permutation. Apply the concept of • permutation to solve simple problems. Define combination. Differentiate between permutation and combination. Apply the formula of combination to solve the related problems.
		Ch- Parabola	<ul style="list-style-type: none"> • Define parabola and related terms. Define eccentricity of a parabola. Derive the equation of parabola.
		Ch- Probability	<ul style="list-style-type: none"> • Appreciate the use of probability in daily life. • Define random experiment and sample space with suitable examples. • Define an event. Recognize and differentiate different types of events and find their probabilities. • Define the concept of conditional probability. Apply reasoning skills to solve problems based on conditional probability. • Interpret mathematical information and identify situations when to apply total probability. Solve problems based on application of total probability. • State Bayes' theorem. Solve practical problems based on Bayes' Theorem.
	December	PERIODIC TEST-II	
	WINTER BREAK		
	January	Ch- Descriptive Statistics	<ul style="list-style-type: none"> • Understand meaning of dispersion in a data set. Differentiate between range, quartile deviation, mean deviation and standard deviation. Calculate range, quartile deviation, mean deviation and standard deviation for ungrouped and grouped data set. Choose appropriate measure of dispersion to calculate spread of data. Define Skewness and Kurtosis using graphical representation of a data set. • Interpret Skewness and Kurtosis of a frequency distribution by plotting the graph. • Calculate coefficient of Skewness and interpret the results. Define Percentile rank and Quartile rank. Calculate and interpret Percentile and Quartile rank of scores in a given data set. • Define correlation in values of two data sets. Calculate Product moment correlation for ungrouped and grouped data. • Calculate Karl Pearson's coefficient of correlation. Calculate Spearman's rank correlation. Interpret the coefficient of correlation.

	Ch- Financial Mathematics	<ul style="list-style-type: none"> • Define the concept of Interest Rates. • Compare the difference between Nominal Interest. Rate, Effective Rate and Real Interest Rate. Solve Practical applications of interest rate. Interpret the concept of simple and compound interest. Calculate Simple Interest and Compound Interest. Explain the meaning nature and concept of equivalency. Analyze various examples for understanding annual equivalency rate . Define with examples the concept of effective rate of interest. • Interpret the concept of compounding and discounting along with practical applications. Compute net present value. Apply net present value in capital budgeting decisions. • Explain the concept of Immediate Annuity, Annuity due and Deferred Annuity. Calculate General Annuity. Calculate the future value of regular annuity, annuity due. Apply the concept of Annuity in real life situations. • Explain fundamentals of taxation. Differentiate between Direct and indirect tax. Define and explain GST . Calculate GST. Explain rules under State Goods and Services Tax (SGST). Central Goods and Services Tax (CGST) and Union Territory Goods and Services Tax (UTGST). Describe the meaning of bills and its various types. Analyze the meaning and rules determining tariff rates. Explain the concept of fixed charge. To interpret and analyse electricity bills, water bills and other supply bills. Evaluate how to calculate units consumed under electricity bills/water bill.
	Ch- Mathematical and Logical Reasoning	<ul style="list-style-type: none"> • Solve logical problems involving odd man out, syllogism, blood relation and coding decoding
February & March	REVISION, PRACTICALS & TERM-II EXAMINATION	

