



Doon Public School

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

Class - XII (Science)

Syllabus for the Session 2026-27

English

Book Prescribed: NCERT			
	Months	Content	Learning Outcomes
Term - I	March - April & May	Chapter No. 1: The Last Lesson (prose), Flamingo	<p>Students will be able to:</p> <p>Remember: The theme and message and traits of Franz and M.Hamel</p> <p>Understand: The importance of one's own language, emotional state of M. Hamel</p> <p>Apply: Linguistic chauvinism and love for one's language in real life situation</p> <p>Analyze: The importance of a teacher in the life of a student</p>
		Notice (Writing)	<p>Students will be able to:</p> <p>Remember: The format and structure of the Notice</p> <p>Understand: The question and use W's properly</p> <p>Apply: Notice in real life scenario for effective communication</p> <p>Analyze: The appropriate use of language while doing the question</p>
		Chapter No. – 2 Lost Spring (Prose, Flamingo)	<p>Students will be able to:</p> <p>Remember: Traits of Sahib and Mukesh, theme and message of the chapter</p> <p>Understand: Harsh realities of slum children, importance of childhood and those traditions that condemn slum children to a life of exploitation</p> <p>Apply: The gained knowledge and understanding of characters's situation into real life situation and be empathetic</p> <p>Analyze: The circumstances and situation of both the protagonists and that society and political class only add to the sufferings of the slum and poor children .</p>
		Chapter No. – 3 Deep Water (Prose, Flamingo)	<p>Students will be able to:</p> <p>Remember: Autobiographical element of the author, theme, message and the chronological events of the chapter in detail</p> <p>Understand: That childhood fears must never be treated lightly, if not tackled properly they make deep inroads in one's psychology</p> <p>Apply: The instances in real life and overcome any hesitation or fear and success can be achieved at point of time in the life (Douglas)</p> <p>Analyze: The situation of Douglas underwater and his attempts to come on the surface</p>

	Chapter No. – 1 The Third Level (Prose, Vistas)	<p>Students will be able to:</p> <p>Remember:The setting of the chapter, the chronological events of the story</p> <p>Understand:Psychological impact of world wars on people and concept of escapism through Charlie</p> <p>Apply:The gained knowledge through Charlie and Sam's character in understanding people's mental situation</p> <p>Analyze:Charlie's personality and impact of grandfather, pre and post world war situations, in shaping his personality.</p>
	Chapter No. –2 The Tiger King (Prose, Vistas)	<p>Students will be able to:</p> <p>Remember: Pre independence era of royal families, theme and message of the chapter</p> <p>Understand: The character traits of the King, his motto of life and impact of prophecy in king's life</p> <p>Apply: The gained knowledge in real life situation and how the king lived and died just to challenge priest's prophecy</p> <p>Analyze: The character sketch of the king and his minister</p>
	Chapter No. – My Mother at Sixty Six (Poem , Flamingo)	<p>Students will be able to:</p> <p>Remember: Theme, message and central idea of the poem</p> <p>Understand: Poetic devices used in the poem and that aging and death is inevitable</p> <p>Apply: The gained knowledge in cherishing the moments spent with loved ones and importance of living in present</p> <p>Analyze: The emotions and fear of losing the mother, bonding between mother- daughter, nostalgic childhood memories</p>
	Letter to the Editor (Writing)	<p>Students will be able to:</p> <p>Remember: The format of the letter</p> <p>Understand: The need and usage of the letter writing</p> <p>Apply: The learned skill to write letters and bring the issues into the limelight through letter writing</p> <p>Analyze: the importance of writing letters</p>

Physics

Book Prescribed: NCERT			
Term - I	Months	Content	Learning Outcomes
			Chapter 1: Electric Charges and Fields

	March - April & May	Chapter 2: Electrostatic Potential and Capacitance	<p>Students will be able to:</p> <p>Remember: Electric potential, potential difference, capacitance and the concept of equipotential surfaces</p> <p>Understand: Potential due to point charge and potential energy due to a dipole</p> <p>Apply: The gained knowledge to solve numerical problems on capacitors with/without dielectric</p> <p>Analyze: Electric potential energy of the system of charges</p>
		Chapter 3: Current Electricity	<p>Students will be able to:</p> <p>Remember: Statement of Ohm's law and the concept of resistivity and conductivity</p> <p>Understand: Concept of drift velocity, mobility and V-I characteristics(linear and non-linear)</p> <p>Apply: Kirchhoff's rules and solve circuit problems</p> <p>Analyze: Internal resistance and temperature dependence of resistors</p>
		Chapter 4: Moving Charges and Magnetism	<p>Remember: Oersted's experiment, Biot-Savart law and Ampere's law.</p> <p>Understand: Magnetic field concepts and force on moving charges.</p> <p>Apply: Ampere's law and Biot-Savart law to determine magnetic field of solenoids, circular loops, and current-carrying conductors.</p> <p>Analyze: Current loop as a magnetic dipole and torque on loop and functioning of galvanometer and its conversion into ammeter and voltmeter</p>

Chemistry

Book Prescribed: NCERT			
	Months	Content	Learning Outcomes
Term - I		Chapter No. – 6 Haloalkanes and Haloarenes	<p>Students will be able to:</p> <p>Remember: The definitions haloalkanes, haloarenes, and their types</p> <p>Understand: The physical properties and nature of C–X bond</p> <p>Apply: The prediction of products of nucleophilic substitution reactions</p> <p>Analyze: The reactivity of different halogen compounds</p>
		Chapter No. – 7 Alcohols, Phenols and Ethers	<p>Students will be able to:</p> <p>Remember: The classification classify alcohols, phenols, and ethers</p> <p>Understand: The process of preparation and chemical properties</p> <p>Apply: The gained knowledge to predict outcomes of addition and oxidation reactions</p> <p>Analyze: Reactivity and acidity among the three groups</p>
	March - April & May	Chapter No. – 1 Solutions	<p>Students will be able to:</p> <p>Remember: The types of solutions and concentration terms</p> <p>Understand: Raoult's law and colligative properties</p> <p>Apply: The knowledge to solve numerical problems on molarity and depression in freezing point</p> <p>Analyze: Deviations from ideal behavior</p>

	Chapter No. – 8 Aldehydes, Ketones and Carboxylic Acids	<p>Students will be able to:</p> <p>Remember: The identification and definition of carbonyl and carboxyl groups</p> <p>Understand: The process of preparation and chemical properties</p> <p>Apply: The gained knowledge to predict outcomes of addition and oxidation reactions</p> <p>Analyze: Reactivity and acidity among the three groups</p>
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Biology

Book Prescribed: NCERT			
	Months	Content	Learning Outcomes
Term -I	March - April & May	Chapter No. – 1 Sexual Reproduction In Flowering Plants.	<p>Students will be able to:</p> <p>Remember: The structure of stamen, pistil and different types of pollination: autogamy, geitonogamy, xenogamy.</p> <p>Understand: The structure of T.S. of an anther, anatropous ovule, process of microsporogenesis, megasporogenesis, artificial hybridization, double fertilization, post-fertilization events, apomixis, parthenocarpy and polyembryony.</p> <p>Apply: The gained knowledge to prepare temporary slide of pollen germination and to understand plant breeding and crop improvement.</p> <p>Analyze: The different types of pollination with their advantages and evaluate the role of artificial hybridization in plant breeding.</p>
		Chapter No. – 2 Human Reproduction	<p>Students will be able to:</p> <p>Remember: The male and female reproductive systems, the role of their primary sex organs, accessory glands, accessory ducts and external genitalia.</p> <p>Understand: The processes of spermatogenesis, oogenesis, menstrual cycle, fertilization, implantation and parturition.</p> <p>Apply: The gained knowledge to identify slides of T.S. testis, T.S. ovaries and T.S. blastula and understand reproductive health and fertility.</p> <p>Analyze: The difference between spermatogenesis and oogenesis. and the importance of reproductive health in maintaining overall Health.</p>
		Chapter No. – 3 Reproductive Health	<p>Students will be able to:</p> <p>Remember: The meaning of reproductive health, problems faced and strategies to solve reproductive health problems.</p> <p>Understand: The different methods of contraception, MTP, causes, symptoms, and treatment of STIs, and methods to have children like IVF, ZIFT, GIFT, IUT, ICSI, AI, IUI.</p> <p>Apply: The gained knowledge of reproductive health to understand the impact of reproductive health issues on individuals and communities.</p> <p>Analyze: The impact of reproductive health issues on individuals and communities and evaluate the importance of reproductive health education and awareness.</p>

	Chapter No. – 4 Principles of Inheritance and Variations.	<p>Students will be able to:</p> <p>Remember: The definition of inheritance and variation and Mendel's laws of inheritance.</p> <p>Understand: The monohybrid and dihybrid crosses, evaluate phenotypic and genotypic ratio in different generations, incomplete dominance, co-dominance, sex- determination, genetic and chromosomal disorders.</p> <p>Apply: The gained knowledge to predict the probability of different genotypes and phenotypes and to understand the inheritance of traits in humans</p> <p>Analyze: The different inheritance patterns and the impact of genetic variation on evolution and adaptation.</p>
	Chapter No. – 5 Molecular Basis of Inheritance.	<p>Students will be able to:</p> <p>Remember: The structure and function of DNA and RNA</p> <p>Understand: The molecular mechanisms of DNA replication, Transcription and Translation, Genetic code, mutations, goals and objectives of Human Genome project, Regulation of gene expression- lac operon, DNA fingerprinting.</p> <p>Apply: The gained knowledge of DNA structure and replication to understand genetic inheritance.</p> <p>Analyze: The impact of genetic mutations on gene expression and protein function.</p>

Mathematics(041)

Book Prescribed: NCERT			
	Months	Content	Learning Outcomes
TERM-I	March - April & May	Chapter No. 3 Matrices	<p>Students will be able to:</p> <p>Remember: The concept of matrices, type of matrices, operations on matrices, transpose of a matrix, symmetric and skew symmetric matrices.</p> <p>Understand: The properties of addition, multiplication of matrices and scalar multiplication</p> <p>Apply: Addition and multiplication of matrices and scalar multiplication to real life problems</p> <p>Analyze: Non- commutativity of multiplication of matrices and existence of non-zero matrices whose product is the zero matrix (order 2) ; the uniqueness of inverse of a matrix, if it exists</p>
		Chapter No. 4 Determinants	<p>Students will be able to:</p> <p>Remember: The key terms - Determinant of a square matrix, minors and co- factors.</p> <p>Understand: The method of finding the adjoint, inverse of a square matrix and number of solutions of system of linear equations</p> <p>Apply: The acquired knowledge to solve the system of linear equations in two or three variables (having unique solution) using inverse of a matrix</p> <p>Analyze: The consistency and inconsistency of solutions</p>
		Chapter No.1 Relations and Functions	<p>Students will be able to:</p> <p>Remember: Types of relations- reflexive, symmetric, transitive.</p> <p>Understand: The concept of equivalence relations and bijective mappings</p> <p>Apply: The gained knowledge to identify equivalence relations and bijective mappings</p> <p>Analyze: Different types of relations and functions</p>

	Chapter No.2 Inverse Trigonometric Functions	<p>Students will be able to:</p> <p>Remember: Definitions and properties of inverse trigonometric functions</p> <p>Understand: Domain and range of inverse trigonometric functions</p> <p>Apply: The gained knowledge to evaluate problems in inverse trigonometric functions</p> <p>Analyze: The restrictions on the domain and range of inverse trigonometric functions</p>
	Chapter No. – 5 Continuity and differentiability	<p>Students will be able to:</p> <p>Remember: The concept of continuity and differentiability, chain rule, derivative of composite functions and inverse trigonometric functions</p> <p>Understand: Derivative of implicit functions and the concept of exponential and logarithmic functions</p> <p>Apply: Differentiation rules to find derivatives of functions, including Trigonometric functions, Exponential and logarithmic functions and Composite functions</p> <p>Analyze: Continuity and differentiability of functions and identifying points of discontinuity</p>

Computer Science

Book Prescribed: Computer Science with Python (Sumita Arora - Dhanpat Rai Pub.)			
	Months	Content	Learning Outcomes
Term -I	March - April & May	Chapter No. 8 : Computer network- I	<p>Students will be able to:</p> <p>Remember: Fundamentals requirements and application of Networking</p> <p>Understand: Explain how data is transferred in a network.</p> <p>Apply: Demonstrate how to connect computers in a simple network.</p> <p>Analyze: Compare advantages and disadvantages of different network topologies.</p>
		Chapter No. 9: Computer network- II	<p>Students will be able to:</p> <p>Remember: Define networking devices such as router, switch, hub, modem, etc</p> <p>Understand: Illustrate how a basic network setup works.</p> <p>Apply: Apply appropriate protocols for specific network tasks (e.g., using FTP to transfer files).Set up a basic wireless network using a router and wireless devices.</p> <p>Analyze: Evaluate the suitability of various network protocols .</p>
		Chapter No. 1 : Python Revision Tour -I	<p>Students will be able to:</p> <p>Remember: Token, Flow of control and looping statements</p> <p>Understand: Describe the difference between entry-controlled & count-controlled loops, use of break and continue within loops and execution flow of conditional statements.</p> <p>Apply: Solve simple real-life problems using loops.</p> <p>Analyze: Debug and correct logic errors in programs involving loops or conditions. Trace the flow of execution in nested conditional or looping structures.</p>

	Chapter No. 2: Python Revision Tour -II	<p>Students will be able to:</p> <p>Remember: List, Tuple, strings, tuples, and dictionaries in Python and built-in functions.</p> <p>Understand: Explain how dictionaries store data in key-value pairs. Python code that uses loops to access elements in lists, tuples, or dictionaries.</p> <p>Apply: Python programs to perform basic operations (add, delete, modify) on lists, tuples, and dictionaries.</p> <p>Analyze: A given piece of code and predict the output or detect logical errors.</p>
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Physical Education

Book Prescribed: S.P Book			
	Months	Content	Learning Outcomes
Term -I	March - April & May	UNIT-1 Management of sporting events	<p>Students will be able to:</p> <p>Remember: Key terms related to event management; Recall different types of sporting events and the stages of event planning</p> <p>Understand: The principles of event management within the context of sports and connection between sport, culture, and community development through events</p> <p>Apply: The gained knowledge to use management principles to design an organizational chart for a sports event ; apply risk management techniques to real-life sports scenarios</p> <p>Analyze: The effectiveness of past sporting events in terms of logistics, audience engagement, and media coverage and identify challenges in managing sporting events and propose solutions</p>
		UNIT-2 Children and Women in Sports	<p>Students will be able to:</p> <p>Remember: Policies and programs that support children and women in sports and define key terms related to gender equity and youth participation in sports</p> <p>Understand: The physical, psychological, and social benefits of sports for children and women and the developmental considerations in training children in sports</p> <p>Apply: Gained knowledge to design a basic training schedule tailored for children or female athletes and apply principles of inclusivity and safety in planning physical activities</p> <p>Analyze: The impact of social, cultural, and economic factors on women's involvement in sports and evaluate the effectiveness of government policies or school programs promoting sports among children and women</p>
		UNIT-10 Training in sports	<p>Students will be able to:</p> <p>Remember: The concept of term training in the context of sports, different types of training and basic training principles</p> <p>Understand: The objectives and importance of training in enhancing sports performance and the role of warm-up, cool-down, and recovery in training sessions</p> <p>Apply: The gained knowledge to design a basic weekly training plan for an athlete in a specific sport and demonstrate proper techniques for basic strength or endurance exercises</p> <p>Analyze: The common training errors or injuries , the training needs of athletes from different sports and the effectiveness of a given training plan using performance outcomes.</p>

Marketing

Book Prescribed: CBSE Notes			
	Months	Content	Learning Outcomes
TERM-I	March - April & May	Chapter No. : 1 Communication Skills IV (Employability Skills)	Students will be able to: Remember: The key terms like verbal, non-verbal, written, and visual communication Understand: The importance of tone, clarity, listening, and feedback in effective communication Apply: Proper communication in real-life banking scenarios (e.g., dealing with customers) Analyze: The communication barriers and suggest improvements
		Unit - Product	Students will be able to: Remember: Key terms like Product, Product Life Cycle (PLC), Introduction, Growth, Maturity, Decline, Packaging, Branding Understand: The stages of PLC and their characteristics; importance and functions of packaging Apply: The gained knowledge to identify real-life products in different PLC stages; design packaging for FMCG products Analyze: Products based on their PLC stage and marketing strategies used

Library & Information Science

Book Prescribed: CBSE			
	Months	Content	Learning Outcomes
TERM-I	March - April & May	Chapter No. : 1 Communication Skills IV (Employability Skills)	Students will be able to: Remember: The do's and don't of good communication Understand: The importance of good communication to enhance personality Apply: The skill of communication for impactful conversation Analyze: The need of good communication in one's life
		Chapter No. : Library Management	Students will be able to: Remember: The fundamental facts and concepts related to library operations Understand: The concept of library management and stock verification Apply: The gained knowledge in practical or simulated tasks Analyze: The challenges faced in the management of library such as system break down, stock discrepancy and the ways to resolve those

Web Application

Book Prescribed: CBSE Resources			
	Months	Content	Learning Outcomes
TERM-I	March - April & May	Chapter No. :1 Communication Skills-IV (Employability Skills)	<p>Students will be able to:</p> <p>Remember: The key components of effective communication</p> <p>Understand: The process and importance of communication skills</p> <p>Apply: Active listening and use appropriate communication techniques in group discussions</p> <p>Analyze: Real-life scenarios to identify communication gaps and suggest improvements</p>
		Chapter 1: Emerging Trends	<p>Students will be able to:</p> <p>Remember: Internet of Things (IoT) and Industrial Internet of Things (IIoT)</p> <p>Understand: The classification of different types of Operating Systems and their use.</p> <p>Apply: The gained knowledge to identify Cloud Computing and Edge Computing , Describe Artificial Intelligence (AI) and Machine Learning (ML)</p> <p>Analyze: The importance of Digital Marketing and its Career Opportunities, Recognize and explain the importance of Social Media Etiquettes</p>

Yoga

Book Prescribed: CBSE Resources			
	Months	Content	Learning Outcomes
TERM-I	March - April & May	Chapter No. :1 Communication Skills-IV (Employability Skills)	<p>Students will be able to:</p> <p>Remember: The types, the elements of the communication process, the 7 Cs of effective communication and barriers to communication</p> <p>Understand: The importance of effective communication in daily life and the workplace, non-verbal communication cues and the difference between formal and informal communication</p> <p>Apply: Effective communication in role-plays and presentations using proper tone, pitch, and body language</p> <p>Analyze: The difference between effective and ineffective communication styles, real-life or simulated scenarios to identify communication gaps or breakdowns and the impact of communication barriers on relationships or work performance</p>
		Unit 1 – Introduction to Yoga and Yogic Practices-II	<p>Students will be able to:</p> <p>Remember: Definition of Yoga, its origin, history, and development in India</p> <p>Understand: The meaning, aims, and importance of Yoga and describe the role of Yoga in physical, mental, and spiritual well-being</p> <p>Apply: The gained knowledge to demonstrate simple yogic practices , correct posture and breathing for relaxation and stress reduction</p> <p>Analyze: The impact of Yoga on stress management and lifestyle diseases</p>