



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	Students will be able to: Remember: The theme and message and traits of Franz and M.Hamel Understand: The importance of one's own language, emotional state of M. Hamel Apply: Linguistic chauvinism and love for one's language in real life situation Analyze: The importance of a teacher in the life of a student
		Notice (Writing)	Students will be able to: Remember: The format and structure of the Notice Understand: The question and use W's properly Apply: Notice in real life scenario for effective communication Analyze: The appropriate use of language while doing the question
		Chapter No. 2: Lost Spring (Prose, Flamingo)	Students will be able to: Remember: Traits of Sahib and Mukesh, theme and message of the chapter Understand: Harsh realities of slum children, importance of childhood and those traditions that condemn slum children to a life of exploitation Apply: The gained knowledge and understanding of character's situation into real life situation and be empathetic 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 .
		Chapter No. 3 : Deep Water (Prose, Flamingo)	Students will be able to: Remember: Autobiographical element of the author, theme, message and the chronological events of the chapter in detail Understand: That childhood fears must never be treated lightly, if not tackled properly they make deep inroads in one's psychology 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) Analyze: The situation of Douglas underwater and his attempts to come on the surface
		Chapter No. 1: The Third Level (Prose, Vistas)	Students will be able to: Remember: The setting of the chapter, the chronological events of the story Understand: Psychological impact of world wars on

			people and concept of escapism through Charlie Apply: The gained knowledge through Charlie and Sam's character in understanding people's mental situation Analyze: Charlie's personality and impact of grandfather, pre and post-world war situations, in shaping his personality.
		Chapter No. 2: The Tiger King (Prose, Vistas)	Students will be able to: Remember: Pre independence era of royal families, theme and message of the chapter Understand: The character traits of the King, his motto of life and impact of prophecy in king's life Apply: The gained knowledge in real life situation and how the king lived and died just to challenge priest's prophecy Analyze: The character sketch of the king and his minister
		Chapter No. My Mother at Sixty Six (Poem , Flamingo)	Students will be able to: Remember: Theme, message and central idea of the poem Understand: Poetic devices used in the poem and that aging and death is inevitable Apply: The gained knowledge in cherishing the moments spent with loved ones and importance of living in present Analyze: The emotions and fear of losing the mother, bonding between mother- daughter, nostalgic childhood memories
		Letter to the Editor (Writing)	Students will be able to: Remember: The format of the letter Understand: The need and usage of the letter writing Apply: The learned skill to write letters and bring the issues into the limelight through letter writing Analyze: the importance of writing letters
	June	SUMMER BREAK	
	July	Chapter No. 4: The Rattrap (Flamingo, Prose)	Students will be able to: Remember: The chronological events of the fairy-tale story and traits of all the characters Understand: The metaphorical representation of rattrap Apply: The message and the moral of the story in real life ; convincing power Analyze: The fact that every human being has an essential goodness that can be awakened through understanding and love
		Chapter No. 5 Indigo (Flamingo, Prose)	Students will be able to: Remember: Political and social scenario (British, sharecroppers, chronological events) of that time Understand: Gandhian philosophy, nonviolence, justice for oppressed Apply: The philosophy that every movement can be made people's movement if there is unbreakable trust and faith. Analyze: Valuing the contribution of ordinary people in the freedom struggle
		Chapter No. 3: Journey to the End of the Earth	Students will be able to: Remember: The geological events during Gondwana land, flora and fauna of that time Understand: The importance of Antarctica region for the existence of human beings Apply: The information of the chapter in preserving and conserving polar regions to ultimately preserving Earth Analyze: The grave situation of climate impact and immediate

			steps to be taken by us
		Invitation Writing, Article writing	Students will be able to: Remember: The various formats of formal and informal invitation writing and report writing Understand: The importance of crisp clear invitations and report writing Apply: The art of framing impressive invitations and reports Analyze: The challenges faced by reporters or media people
		Chapter No. – Poem Keeping Quiet (Flamingo)	Students will be able to: Remember: Theme, message and central idea of the poem Understand: Poetic devices used, interpretation, importance of introspection Apply: Introspection, brotherhood, process of healing and nature being the supreme teacher in real life Analyze: The power of introspection and global brotherhood
		Chapter No. – Poem A Thing of Beauty(Flamingo)	Students will be able to: Remember: The theme and message of the poem Understand: The healing power of Nature and that it always give solace Apply: The contextual knowledge of the poem in the real life situation and living a worthy life Analyze: The importance of Nature and the bounties we have
	August	PERIODIC TEST I	
		Chapter No. 4: The Enemy (Vistas)	Students will be able to: Remember: The theme message and traits of the Dr. Sadao Understand: The difference between a responsible citizen , true patriot and an ethical professionalism Apply: The fact that Personal and professional ethics are different but sometimes you have to rise above all as a human being Analyze: That choices shape us as an individual
		Report Writing	Students will be able to: Remember: The various formats of formal and informal invitation writing and report writing Understand: The importance of crisp clear invitations and report writing Apply: The art of framing impressive invitations and reports Analyze: The challenges faced by reporters or media people
		Chapter No. 5: On the Face of It. (Vistas)	Students will be able to: Remember: The characteristics of Derry and Lamb Understand: The pain of physical handicapped is far less than the sense of alienation they feel and society can help Apply: The understanding in being mindful and give space, opportunities , love, care to disabled people to help in their inclusion Analyze: The pain, agony and challenges faced by disabled people
		Chapter No. 6: Poets and Pancakes (Flamingo)	Students will be able to: Remember: The theme message and traits of the Subbu. Understand: The structure of the chapter, and that the course of the events is not in a storyline. Apply: The glimpses of office politics prevailing at every work place and learn to avoid it do your work sincerely Analyze: The various personalities in the chapter and that it's a small world

		Chapter No. 7: The Interview (Flamingo)	Remember: The various definitions of Interviews given by different poets Understand: The conversation and interview pattern Apply: The art of framing good questions to get the desirable answer and make people comfortable with your communication skills Analyze: The challenges faced by reporters or media people
		A Roadside Stand (Poem, Flamingo)	Students will be able to: Remember: Idea, theme and message of the poem Understand: The social division- poor and rich people Apply: The empathetic behaviour with others but not to involve to the extent wherein you suffer at the end Analyze: The easy lives of city dwellers and hardships in the lives of rural people
	September	TERM I EXAMINATION	

Physics

Book Prescribed: NCERT			
Term - 1	Months	Content	Learning Outcomes
	March - April & May	Chapter 1: Electric Charges and Fields	Students will be able to: Remember: Electric charge, Coulomb's law, conservation of charge Understand: The principle of superposition, concept of electric field, field lines, and continuous charge distribution Apply: The concept of Gauss's Theorem to derive and calculate the electric field for: An infinitely long straight wire Analyze: The stable and unstable equilibrium positions of a dipole in a uniform electric field based on the torque equation
		Chapter 2: Electrostatic Potential and Capacitance	Students will be able to: Remember: Electric potential, potential difference, capacitance and the concept of equipotential surfaces Understand: Potential due to point charge and potential energy due to a dipole Apply: The gained knowledge to solve numerical problems on capacitors with/without dielectric Analyze: Electric potential energy of the system of charges
		Chapter 3: Current Electricity	Students will be able to: Remember: Statement of Ohm's law and the concept of resistivity and conductivity Understand: Concept of drift velocity, mobility and V-I characteristics(linear and non-linear) Apply: Kirchhoff's rules and solve circuit problems Analyze: Internal resistance and temperature dependence of Resistors
		Chapter 4: Moving Charges and Magnetism	Students will be able to: Remember: Oersted's experiment, Biot-Savart law and Ampere's law. Understand: Magnetic field concepts and force on moving charges. Apply: Ampere's law and Biot-Savart law to determine magnetic field of solenoids, circular loops, and current-carrying conductors. Analyze: Current loop as a magnetic dipole and torque on loop and functioning of galvanometer and its conversion into ammeter and voltmeter

	June	SUMMER BREAK	
July	Chapter No. – 5 Magnetism and Matter	Students will be able to: Remember: Magnetization, and define magnetic dipole, Understand: Basic Properties of magnets and some important definitions connected to magnetism Apply: Concept of torque on dipole and deduce an expression for the potential energy of a dipole placed in a magnetic field Analyze: Differentiate ‘dia/ para/ ferromagnetism’ on the basis of range/order of magnitude of the values of χ , μ_r and μ	
	Chapter No. – 6 Electromagnetic Induction	Students will be able to: Remember: Magnetic flux, Faraday's laws, Lenz's law, induced EMF/current, and self/mutual induction with their SI units Understand: Motional EMF generation, Lenz's law as a reflection of energy conservation, and the physical mechanism behind self and mutual inductance Apply: Faraday's equations, motional EMF formulas, and inductance coefficients to solve numerical problems regarding induced quantities Analyze: Factors affecting inductance coefficients (geometry, turns, core material) and the characteristics of energy stored in a magnetic field	
	Chapter No. – 7 Alternating Current	Students will be able to: Remember: Peak and RMS values of AC current/voltage, reactance, impedance, resonance condition, power factor, watt less current, and the working elements of an AC generator and transformer. Understand: Phase relationships between voltage and current in L, C, and R components, the mechanism of electrical resonance, power dissipation in AC circuits, and the operational principles of transformers and generators. Apply: Phasor diagrams, impedance formulas, resonant frequency, and transformer turn ratios to solve numerical problems. Analyze: Variations of circuit impedance and current with frequency in an LCR series circuit, energy losses in a transformer, and the role of the power factor in efficient electrical power transmission.	
	Chapter No. – 8 Electromagnetic Waves	Students will be able to: Remember: Concept of displacement current, basic properties of electromagnetic waves, their transverse nature, and the classification, frequency/wavelength ranges, and primary uses of all regions of the electromagnetic spectrum Understand: Necessity of displacement current for consistency in Ampere's Law, the mechanism of EM wave propagation through oscillating electric and magnetic fields, and the distinct characteristics of each spectrum band Apply: Relations between wavelength, frequency, and speed of light, as well as electric and magnetic field amplitudes, to solve numerical and identification problems. Analyze: Transverse nature of EM waves based on mutually perpendicular electric and magnetic field vectors, and the correlation between the energy/penetration power of spectrum waves and their specific real-world applications.	
	August	PERIODIC TEST I	

		Chapter No. – 12 Atoms	Students will be able to: Remember: Experimental observations of alpha-particle scattering, postulates of Rutherford's nuclear model, postulates of Bohr's atomic model, and the named series of the hydrogen line spectrum. Understand: Mechanism of alpha-particle trajectories (impact parameter and distance of closest approach), orbital stability vs. electromagnetic instability in classical models, and the origin of discrete spectral lines through electron energy transitions. Apply: Formulae for the radius of an atom, velocity, and total energy of an electron in the Bohr orbit, along with the Rydberg formula, to solve numerical problems. Analyze: Relationship between kinetic and potential energies of an orbiting electron, the physical significance of negative total energy signifying a bound state, and the limitations of both the Rutherford and Bohr atomic models
		Chapter No. – 13 Nuclei	Students will be able to: Remember: Composition of the nucleus (protons and neutrons), nuclear size, properties of the nuclear force, Einstein's mass-energy equivalence, definition of mass defect and binding energy per nucleon, and the definitions of nuclear fission and nuclear fusion Understand: Proportionality of nuclear radius to the cube root of the mass number, the constant density of nuclear matter, the mechanism of mass loss converted into binding energy, and the process of energy release through the reconfiguration of nucleons Apply: Formulae for nuclear radius, mass defect, total binding energy, and binding energy per nucleon to solve numerical problems and calculate the energy released in fission and fusion reactions Analyze: Trends in the binding energy per nucleon curve versus mass number to explain the stability of nuclei, the maximum stability around iron, and the thermodynamic favourability of fission for heavy nuclei and fusion for light nuclei
	September	TERM I EXAMINATION	

Chemistry

Book Prescribed: NCERT			
	Months	Content	Learning Outcomes
Term -1	March - April & May	Chapter No. – 6 Haloalkanes and Haloarenes	Students will be able to: Remember: The definitions of haloalkanes, haloarenes, and their types Understand: The physical properties and nature of C–X bond Apply: The prediction of products of nucleophilic substitution reactions Analyze: The reactivity of different halogen compounds
		Chapter No. – 7 Alcohols, Phenols and Ethers	Students will be able to: Remember: The classification classify alcohols, phenols, and ethers Understand: The process of preparation and chemical properties Apply: The gained knowledge to predict outcomes of addition and oxidation reactions Analyze: Reactivity and acidity among the three groups

		Chapter No. – 1 Solutions	Students will be able to: Remember: The types of solutions and concentration terms Understand: Raoult's law and colligative properties Apply: The knowledge to solve numerical problems on molarity and depression in freezing point Analyze: Deviations from ideal behavior
	June	SUMMER BREAK	
		Chapter No. – 8 Aldehydes, Ketones and Carboxylic Acids	Students will be able to: Remember: The identification and definition of carbonyl and carboxyl groups Understand: The process of preparation and chemical properties Apply: The gained knowledge to predict outcomes of addition and oxidation reactions Analyze: Reactivity and acidity among the three groups
		Chapter No. – 2 Electrochemistry	Students will be able to: Remember: The concept of oxidation, reduction, and cell terminology Understand: The working of galvanic and electrolytic cells Apply: The knowledge to calculate EMF and use Nernst equation Analyze: Standard electrode potentials to predict reactions
	July	Chapter No. – 9 Amines	Students will be able to: Remember: Definition and classification of amines Understand: The structure, preparation, and basicity of amines Apply: The gained knowledge to predict reactions of amines with reagents Analyze: Primary, secondary, and tertiary amines
	August	PERIODIC TEST I	
		Chapter No. – 3 Chemical Kinetics	Students will be able to: Remember: The rate of reaction and related terms Understand: Rate laws and order of reactions Apply: The knowledge to solve numerical using integrated rate equations Analyze: Graphs and reaction mechanisms
		Chapter No. – 10 Biomolecules	Students will be able to: Remember: The types of biomolecules and their monomers Understand: The structure and functions of carbohydrates, proteins, and nucleic acids Apply: The gained knowledge to classify biomolecules based on function and structure Analyze: The difference between types of sugars, amino acids, and enzymes
	September	TERM I EXAMINATION	

Biology

Book Prescribed: NCERT			
	Months	Content	Learning Outcomes
Term -1		Chapter No. 1: Sexual Reproduction In Flowering Plants.	Students will be able to: Remember: The structure of stamen, pistil and different types of pollination: autogamy, geitonogamy, xenogamy Understand: The structure of T.S. of an anther, anatropous ovule,

	March - April & May		process of microsporogenesis, megasporogenesis, artificial hybridization, double fertilization, post-fertilization events, apomixis, parthenocarpy and polyembryony Apply: The gained knowledge to prepare temporary slide of pollen germination and to understand plant breeding and crop improvement Analyze: The different types of pollination with their advantages and evaluate the role of artificial hybridization in plant breeding
		Chapter No. 2: Human Reproduction	Students will be able to: Remember: The male and female reproductive systems, the role of their primary sex organs, accessory glands, accessory ducts and external genitalia Understand: The processes of spermatogenesis, oogenesis, menstrual cycle, fertilization, implantation and parturition Apply: The gained knowledge to identify slides of T.S. testis, T.S. ovaries and T.S. blastula and understand reproductive health and fertility Analyze: The difference between spermatogenesis and oogenesis. and the importance of reproductive health in maintaining overall Health
		Chapter No. 3: Reproductive Health	Students will be able to: Remember: The meaning of reproductive health, problems faced and strategies to solve reproductive health problems 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, and IUI Apply: The gained knowledge of reproductive health to understand the impact of reproductive health issues on individuals and communities Analyze: The impact of reproductive health issues on individuals and communities and evaluate the importance of reproductive health education and awareness
		Chapter No. 4: Principles of Inheritance and Variations.	Students will be able to: Remember: The definition of inheritance and variation and Mendel's laws of inheritance Understand: The monohybrid and dihybrid crosses, evaluate phenotypic and genotypic ratio in different generations, incomplete dominance, co-dominance, sex- determination, genetic and chromosomal disorders Apply: The gained knowledge to predict the probability of different genotypes and phenotypes and to understand the inheritance of traits in humans Analyze: The different inheritance patterns and the impact of genetic variation on evolution and adaptation
		Chapter No. 5: Molecular Basis of Inheritance.	Students will be able to: Remember: The structure and function of DNA and RNA 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. Apply: The gained knowledge of DNA structure and replication to understand genetic inheritance. Analyze: The impact of genetic mutations on gene expression and protein function.
	June	SUMMER BREAK	

	July	Chapter No. 6: Evolution	Students will be able to: Remember: The meaning of evolution and its significance in biology. Understand: The Miller's experiment, homologous and analogous organs, Hardy-Weinberg principle, adaptive radiation, natural selection and human evolution. Apply: The gained knowledge of evolutionary principles to understand the adaptation of organisms to their environments and the evolutionary relationships between organisms. Analyze: Different theories of evolution and evaluate The importance of evolution in understanding the complexity of life on Earth.
		Chapter No. 7: Human Health and Diseases	Students will be able to: Remember: Concepts of health and disease, pathogens, immunity, vaccines, allergies, autoimmune disorders, cancer, drug types, and drug addiction Understand: The body's immune responses, mechanisms of disease transmission, causes and prevention of cancer, and the effects of alcohol, tobacco, narcotics, and other addictive drugs on human health Apply: The gained knowledge to relate vaccination, hygienic practices, and healthy lifestyle choices to disease prevention and identify measures to avoid substance abuse and addiction Analyze: The impact of infectious diseases, cancer, and drug addiction on individuals and society and evaluate strategies for prevention, control, and rehabilitation
August	PERIODIC TEST I		
		Chapter No. 8: Microbes In Human Welfare	Students will be able to: Remember: Useful microbes and their applications in industry, agriculture, medicine, and sewage treatment Understand: The role of microbes in food production, biogas generation, and environmental management Apply: Microbial products and relate their applications to real-life situations Analyze: The significance of microbes in sustainable development and environmental conservation
		Chapter No. 9: Biotechnology: Principles and Processes	Students will be able to: Remember: Tools of recombinant DNA technology and steps involved in genetic engineering. Understand: Principles of biotechnology, cloning vectors, enzymes, and gene transfer techniques. Apply: The gained knowledge to illustrate recombinant DNA technology processes and identify appropriate tools for genetic manipulation. Analyze: The role of various enzymes, vectors, and host organisms in biotechnology applications.
		Chapter No. 10: Biotechnology and its Applications	Students will be able to: Remember: Applications of biotechnology in medicine, agriculture, and environmental management Understand: Transgenic organisms, gene therapy, molecular diagnosis, and biopiracy Apply: The gained knowledge to relate biotechnology applications to healthcare, agriculture, and industrial production. Analyze: The benefits, risks, ethical concerns, and socio-economic impacts of biotechnology.
September	TERM I EXAMINATION		

Mathematics(041)

Book Prescribed: NCERT			
	Months	Content	Learning Outcomes
Term-1	March – April & May	Chapter No. 3 Matrices	Students will be able to: Remember: The concept of matrices, type of matrices, operations on matrices, transpose of a matrix, symmetric and skew symmetric matrices. Understand: The properties of addition, multiplication of matrices and scalar multiplication Apply: Addition and multiplication of matrices and scalar multiplication to real life problems 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
		Chapter No. 4 Determinants	Students will be able to: Remember: The key terms - Determinant of a square matrix, minors and co- factors. Understand: The method of finding the adjoint, inverse of a square matrix and number of solutions of system of linear equations Apply: The acquired knowledge to solve the system of linear equations in two or three variables (having unique solution) using inverse of a matrix Analyze: The consistency and inconsistency of solutions
		Chapter No.1 Relations and Functions	Students will be able to: Remember: Types of relations- reflexive, symmetric, transitive. Understand: The concept of equivalence relations and bijective mappings Apply: The gained knowledge to identify equivalence relations and bijective mappings Analyze: Different types of relations and functions
		Chapter No.2 Inverse Trigonometric Functions	Students will be able to: Remember: Definitions and properties of inverse trigonometric functions Understand: Domain and range of inverse trigonometric functions Apply: The gained knowledge to evaluate problems in inverse trigonometric functions Analyze: The restrictions on the domain and range of inverse trigonometric functions
		Chapter No. – 5 Continuity and differentiability	Students will be able to: Remember: The concept of continuity and differentiability, chain rule, derivative of composite functions and inverse trigonometric functions Understand: Derivative of implicit functions and the concept of exponential and logarithmic functions Apply: Differentiation rules to find derivatives of functions, including Trigonometric functions, Exponential and logarithmic functions and Composite functions Analyze: Continuity and differentiability of functions and identifying points of discontinuity

	June	SUMMER BREAK	
	July	Chapter No. – 6 Application of derivatives (Rate of change , Increasing and decreasing functions, Maxima and Minima)	Students will be able to: Remember: The concepts of derivatives and their applications, definitions of maxima, minima, critical points, and first/second derivative tests Understand: The rate of change of functions with respect to a variable, increasing/decreasing functions and the concepts of local and absolute maxima/minima and conditions for their existence Apply: The gained knowledge to use derivatives to find rates of change, identify increasing/decreasing intervals and solve optimization problems Analyze: Different functions to determine their behaviour (increasing/decreasing) and solve related problems and various real-life problems and determine maximum or minimum values
	August	PERIODIC TEST I	
		Chapter No. – 7 Integers	Students will be able to: Remember: The key difference between definite and indefinite integrals Understand: Integration as inverse process of differentiation Apply: The gained knowledge to solve problems of Integration of variety of functions by substitution method, partial fractions and integration by parts Analyze: Different integration techniques and their applications
		Chapter No. – 8 Application of Integrals	Students will be able to: Remember: Key concepts related to application of integrals Understand: How integrals are used to solve real-world problems Apply: The gained knowledge in finding the area under simple curves, especially lines, circles/ parabolas/ellipses Analyze: Area under different curves
		Chapter No. – 9 Differential Equations	Students will be able to: Remember: Definition, order and degree, general and particular solutions of a differential equation Understand: General and particular solutions of a differential equation Apply: Various techniques to solve differential equations Analyze: Solutions of differential equations in the context of real world problems
	September	TERM I EXAMINATION	

Computer Science

Book Prescribed: Computer Science with Python (Sumita Arora - Dhanpat Rai Pub.)			
	Months	Content	Learning Outcomes
Term -I		Chapter No. 8 : Computer network- I	Students will be able to: Remember: Fundamentals requirements and application of Networking Understand: How data is transferred in a network Apply: The skill to demonstrate how to connect computers in a simple network Analyze: The advantages and disadvantages of different network topologies

March - April & May	Chapter No. 9: Computer network- II	Students will be able to: Remember: The steps of networking devices such as router, switch, hub, modem, etc Understand: How a basic network setup works 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. Analyze: The suitability of various network protocols .
	Chapter No. 1 : Python Revision Tour -I	Students will be able to: Remember: Token, Flow of control and looping statements Understand: Describe the difference between entry-controlled & count-controlled loops, use of break and continue within loops and execution flow of conditional statements. Apply: Solve simple real-life problems using loops. Analyze: Debug and correct logic errors in programs involving loops or conditions. Trace the flow of execution in nested conditional or looping structures.
	Chapter No. 2: Python Revision Tour -II	Students will be able to: Remember: List, Tuple, strings, tuples, and dictionaries in Python and built-in functions. Understand: Explain how dictionaries store data in key-value pairs. Python code that uses loops to access elements in lists, tuples, or dictionaries. Apply: Python programs to perform basic operations (add, delete, modify) on lists, tuples, and dictionaries. Analyze: A given piece of code and predict the output or detect logical errors.
June	SUMMER BREAK	
July	Chapter No. 10: Relational Databases	Students will be able to: Remember: The key terms such as database, table, record, field, primary key, and foreign key.List common relational database management systems (RDBMS), e.g., MySQL, SQLite, PostgreSQL.Recall SQL commands like SELECT, INSERT, UPDATE, DELETE Understand: The structure of a relational database and how data is stored in tables Apply: The gained knowledge to create and modify simple relational database tables using SQL. Write and execute SQL queries to insert, retrieve, and manipulate data Analyze: The relationship type (one-to-one, one-to-many, many-to-many) between tables
	Chapter No. 11: Simple Queries in SQL	Students will be able to: Remember: The basic SQL commands (e.g., SELECT, FROM, WHERE, ORDER BY, DISTINCT) Understand: How the SELECT statement retrieves data from a database Apply: The knowledge to write steps for basic SQL queries to retrieve specific data from a table. Analyze: The conditions in WHERE clause to filter results Appropriately

		Chapter No. 12: Table Creation and data manipulation Commands	Students will be able to: Remember: SQL and its purpose. List common Data Definition Language (DDL) and Data Manipulation Language (DML) commands. Interpret the syntax of commands like CREATE TABLE, INSERT, UPDATE, DELETE, and SELECT." Understand: The difference between DDL and DML. Apply: The knowledge to retrieve data using the SELECT command with different clauses (e.g., WHERE, ORDER BY). Analyze: The impact of constraints like PRIMARY KEY, NOT NULL, and UNIQUE on data integrity
	August		PERIODIC TEST I
		Chapter No. 13: Grouping Records , Joins in SQL	Students will be able to: Remember: The purpose of GROUP BY, HAVING, and different types of SQL joins (INNER, LEFT, RIGHT, FULL) Understand: The difference between WHERE and HAVING clauses ; distinguish among the various types of joins and when to use each, interpret the results of grouped queries and joined tables. Apply: The knowledge to solve real-life problems involving data summarization and table relationships. Analyze: The meaning of query performance and optimize SQL statements for better results.
		Chapter No. 3: Working with Function	Students will be able to: Remember: The key terms related to functions such as function, parameter, argument, return value, etc. List different types of functions (e.g., built-in vs. user-defined). Recall the syntax for defining and calling a function in a programming language (e.g., Python, Java). Understand: How parameters and arguments work in function calls Apply: The simple functions to perform specific tasks (e.g., add two numbers, check even/odd, calculate area) Analyze: The errors or issues in function definitions or function calls. Break a complex problem into smaller sub-problems using functions.
	September		TERM I EXAMINATION

Physical Education

Book Prescribed: S.P Book			
	Months	Content	Learning Outcomes
Term - I	March - April & May	UNIT-1 Management of sporting events	Students will be able to: Remember: Key terms related to event management; Recall different types of sporting events and the stages of event planning Understand: The principles of event management within the context of sports and connection between sport, culture, and community development through events 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 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

		UNIT-2 Children and Women in Sports	Students will be able to: Remember: Policies and programs that support children and women in sports and define key terms related to gender equity and youth participation in sports Understand: The physical, psychological, and social benefits of sports for children and women and the developmental considerations in training children in sports 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 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
		UNIT-10 Training in sports	Students will be able to: Remember: The concept of term training in the context of sports, different types of training and basic training principles Understand: The objectives and importance of training in enhancing sports performance and the role of warm-up, cool-down, and recovery in training sessions 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 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.
	June	SUMMER BREAK	
	July	UNIT-4 Physical education and sports for CWSN (Children with special needs -divyang)	Students will be able to: Remember: The meaning of CWSN, types of disabilities, paralympics and Special Olympics Understand: The importance of inclusion, physical activity benefits, the roles of schools, teachers, and families Apply: Inclusive activities, modify games for accessibility, and promote team spirit and acceptance for CWSN Analyze: The barriers for CWSN, sports' role in inclusion, and reflect on successful CWSN athletes and programs
		UNIT-5 Sports and Nutrition	Students will be able to: Remember: The meaning of nutrition, nutrients its sources, importance of hydration, dietary supplements Understand: The importance of nutrition and its impact in recovery, endurance Apply: Tailored nutritional and hydration plans for athletes Analyze: The sports nutrition strategies, poor nutrition's impact
	August	PERIODIC TEST I	
		UNIT-6 Test and measurement in sports	Students will be able to: Remember: The meaning of test, measurement, and evaluation in sports Understand: The purpose of fitness and skill tests, how to calculate results, and interpret scores against standards Apply: The use of test outcomes to design training programs with techniques suited to the sports Analyze: Different tests to evaluate overall fitness and its relation to sports performance

		UNIT-7 Physiology and injuries in sports	Students will be able to: Remember: The meaning of physiology, sports injuries, types of injuries Understand: The physiological responses to exercise and body's recovery process and the importance of preventive measures Apply: First aid techniques to the injuries, manage fatigue and recovery, and recommend safe practices and equipment Analyze: The difference between acute versus chronic injuries causes of injury, access injury-prone areas
	September	TERM I EXAMINATION	

Marketing

Book Prescribed: CBSE Notes			
	Months	Content	Learning Outcomes
TERM-I	March - April & May	Unit : 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 –I Product (Subject specific skill)	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
	June	SUMMER BREAK	
	July	Unit-II Price Decision (Subject specific skill)	Students will be able to: Remember: Meaning of price, pricing methods and pricing objectives Understand: Factors affecting pricing decisions and the importance of pricing strategies Apply: Pricing concepts to real-life business situations and products Analyze: Different pricing strategies used by companies in competitive markets
		Unit-III Place Decision: Channels of Distribution (Subject specific skill)	Students will be able to: Remember: Meaning and types of distribution channels; role of intermediaries Understand: The importance of distribution in making products available to consumers Apply: Distribution concepts in identifying channels used by different companies Analyze: The effectiveness of various distribution strategies and supply chain systems

		Unit-II Self-Management Skills-IV (Employability Skill)	Students will be able to: Remember: The concepts of self-awareness, self-confidence, motivation and stress management Understand: The importance of positive attitude, goal setting and time management Apply: Self-management techniques in personal and academic life Analyze: Different situations involving stress and ways to handle them effectively
	August	PERIODIC TEST I	
		Unit-III ICT Skills (Employability Skill)	Students will be able to: Remember: Basic computer operations, internet usage and digital tools Understand: The role of ICT in communication, education and business Apply: ICT skills for presentations, data handling and online collaboration Analyze: The advantages and limitations of digital technologies in daily life
	September	TERM I EXAMINATION	

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
	June	SUMMER BREAK	
	July	Chapter No. 2: Organization of Library Resources: Advanced	Students will be able to: Remember: The key concepts and terminology related to organizing library resources. Understand: The purpose and function of organizing systems in libraries. Apply: The knowledge in real-world or simulated cataloging and classification tasks. Analyze: The understanding to break down complex cataloging/classification processes and evaluate them.
		Chapter No. 2: Self- Management Skills-IV	Students will be able to: Remember: The basic facts, definitions, and concepts related to self-management

		(Employability Skills)	Understand: The importance of self motivation and self management Apply: The techniques of self management in daily life situations Analyze: The complex behavior patterns or problems to understand causes and effects
	August	PERIODIC TEST I	
		Chapter No. 3: ICT Skills-IV (Employability Skills)	Students will be able to: Remember: basic ICT tools and terms (e.g., hardware, software, internet, email). Understand: the function of different ICT tools like MS Word, Excel, and presentation software. Apply: basic formatting tools in word processing software. Analyze: the effectiveness of different ICT tools for specific educational purposes.
		Chapter No. : 3 Name of the Chapter : Library and Information Services	Students will be able to: Remember: Key definitions "reference services," "current awareness service (CAS)," and "selective dissemination of information (SDI)." Understand: The concepts and interpret the purpose of services. Apply: The knowledge in practical scenarios involving information services Analyze: Break down systems/service and evaluate effectiveness.
	September	TERM I EXAMINATION	

Web Application

Book Prescribed: CBSE Resources			
	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 components of effective communication Understand: The process and importance of communication skills Apply: Active listening and use appropriate communication techniques in group discussions Analyze: Real-life scenarios to identify communication gaps and suggest improvements
		Chapter 1: Emerging Trends (Subject Specific)	Students will be able to: Remember: Internet of Things (IoT) and Industrial Internet of Things (IIoT) Understand: The classification of different types of Operating Systems and their use. Apply: The gained knowledge to identify Cloud Computing and Edge Computing , Describe Artificial Intelligence (AI) and Machine Learning (ML) Analyze: The importance of Digital Marketing and its Career Opportunities, Recognize and explain the importance of Social Media Etiquette
	June	SUMMER BREAK	

	July	Chapter4 : Cyber Safety and Security (Subject Specific)	Students will be able to: Remember: Define cyber safety, cyber security, and cyber ethics. Identify common cyber threats such as viruses, phishing, malware, and hacking. Recall safe internet practices and password guidelines. Understand: Explain the importance of cyber safety and responsible online behavior. Describe how cyber threats affect individuals and organizations. Discuss the need for strong passwords, antivirus software, and data privacy. Apply: Create strong and secure passwords for online accounts. Demonstrate safe browsing and email practices to avoid cyber threats. Analyze: Differentiate between safe and unsafe online activities. Analyze real-life cybercrime scenarios and suggest preventive measures. Evaluate the authenticity of emails, websites, and online messages to identify potential cyber threats.
		Unit-III ICT Skills (Employability Skill)	Students will be able to: Remember: Basic computer operations, internet usage and digital tools Understand: The role of ICT in communication, education and business Apply: ICT skills for presentations, data handling and online collaboration Analyze: The advantages and limitations of digital technologies in daily life
	August		PERIODIC TEST I
		Unit-II Self-Management Skills-IV (Employability Skill)	Students will be able to: Remember: The concepts of self-awareness, self-confidence, motivation and stress management Understand: The importance of positive attitude, goal setting and time management Apply: Self-management techniques in personal and academic life Analyze: Different situations involving stress and ways to handle them effectively
	September		TERM I EXAMINATION

Yoga

Book Prescribed: CBSE Resources			
	Months	Content	Learning Outcomes
TERM-I	March - April & May	Chapter No. :1 Communication Skills-IV (Employability Skills)	Students will be able to: Remember: The types, the elements of the communication process, the 7 Cs of effective communication and barriers to communication Understand: The importance of effective communication in daily life and the workplace, non-verbal communication cues and the difference between formal and informal communication Apply: Effective communication in role-plays and presentations using proper tone, pitch, and body language 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
		Unit 1 – Introduction to Yoga and Yogic Practices-II	Students will be able to: Remember: Define Yoga and explain its origin, history, and development in India. Recall basic terms like Asana, Pranayama, and Meditation. Understand: Explain the meaning, aims, and importance of Yoga. Describe the role of Yoga in physical, mental, and spiritual well-being. Apply: Demonstrate simple yogic practices (basic asanas and breathing techniques). Practice correct posture and breathing for relaxation and stress reduction. Analyze: Analyze the impact of Yoga on stress management and lifestyle diseases. Compare Yoga with other physical activities in terms of benefits and outcomes.
	June		SUMMER BREAK
		UNIT-2 Self Management Skills II (Employability Skill)	Students will be able to: Remember: The definition of self-management, its key skills such as self-discipline, motivation, organization and recall techniques for managing time, stress, and emotions effectively Understand: The importance of self-management in personal and academic life and the consequences of poor selfmanagement, importance of self discipline in forming habits and routines to yield productivity Apply: The knowledge of SMART goals for personal or academic growth, time management tool and stress-reducing strategies to organize tasks Analyze: Effective vs. ineffective self-management strategies in different scenarios, obstacles to self-management and how self- management impacts academic performance and relationships
	July	UNIT-2 Introduction to Yoga Texts- II (Yoga)	Students will be able to: Remember: Recall important Yoga texts such as <i>Hatha Yoga Pradipika</i>, <i>Gheranda Samhita</i>, and <i>Shiva Samhita</i>. Identify the author of <i>Hatha Yoga Pradipika</i> (Swami Swatmarama). Understand: Explain the meaning and importance of Yoga texts in understanding yogic practices. Describe the basic content of <i>Hatha Yoga Pradipika</i> (Asana, Pranayama, Mudra, Samadhi). Understand that these texts provide practical and philosophical guidance for Yoga. Apply: Apply teachings from Yoga texts in performing basic yogic practices (asana and breathing). Follow simple guidelines from texts like discipline, posture, and breathing control. Analyze: Analyze how Yoga texts guide physical, mental, and spiritual development. Compare different Yoga texts in terms of their focus (practical vs philosophical). Evaluate the relevance of ancient Yoga texts in modern lifestyle.

	August	PERIODIC TEST I	
		UNIT- 3 Information & Communication Technology Skills (Employability Skill)	Students will be able to: Remember: Basic keyboard shortcuts and functions, computer system parts and common ICT tools Understand: The importance of ICT in education, work, and daily life and describe key software functions, digital communication tools and basic user interface elements Apply: The acquired knowledge to use word processors for document creation and formatting, send and receive emails with attachments, safely search the internet, and create basic slide presentations Analyze: ICT's impact on communication, learning, and work and cyber safety issues with prevention strategies
	September	TERM I EXAMINATION	

Psychology

Book Prescribed: NCERT			
	Months	Content	Learning Outcomes
TERM-I	March - April & May	Chapter No. 1: Variations in Psychological attributes	Students will be able to: Remember: Psychological attributes and theories of intelligence Understand: The difference between aptitude ,interest and intelligence and interpret the meaning behind IQ scores and standardized testing Apply: The gained knowledge to describe real-life behaviours and understand their own strengths Analyze: How individual differences are shaped by biological as well as environmental influences and how cultural differences affect psychological testing
		Chapter No. 2: Self and Personality	Students will be able to: Remember: Concept and definition of self-concept, personality, traits, types Understand: The difference between self and personality ; Components of self (self-esteem, self-efficacy, self-regulation) and the role of cultural and social factors in shaping personality Apply: The acquired knowledge to use psychological tests to assess personality and relate theories to real-life behavior or personal experiences Analyze: The strengths and limitations of personality assessments and how environment and heredity influence personality
		Chapter No. 3 : Meeting life challenges	Students will be able to: Remember: Definitions: stress, coping, resilience; Types of stress: eustress, distress and key concepts: GAS model, stressors, defense mechanisms Understand: Psychological and physiological effects of stress ; Role of perception in stress experience Apply: Stress management techniques (meditation, time management, relaxation) and identify personal stressors and coping styles Analyze: The difference between effective and ineffective coping strategies, and how individual differences (personality,

			gender, resources) affect stress response
	June	SUMMER BREAK	
	July	Chapter No. 4: Psychological Disorders	Students will be able to: Remember: Recall the names, types, key features, and classification of various psychological disorders such as anxiety disorders, mood disorders, schizophrenia, and behavioural disorders. Understand: Explain the nature, causes, and characteristics of different psychological disorders, including biological, psychological, and socio-cultural factors, and understand the basis of their classification systems. Apply: Use knowledge of psychological disorders to identify symptoms in real-life situations, interpret case studies, and develop sensitivity towards individuals experiencing psychological distress. Analyze: Differentiate between various psychological disorders by comparing their symptoms, causes, and consequences, and examine how multiple factors interact in the development and manifestation of these disorders.
	August	PERIODIC TEST I	
		Chapter No. 5 : Therapeutic approaches	Students will be able to: Remember: Recall the names, key features, techniques, and goals of various therapeutic approaches and types of mental health professionals. Understand: Explain the principles, processes, and underlying assumptions of different therapies and the importance of the therapeutic relationship and ethics. Apply: Use basic therapeutic principles to understand everyday problems, suggest coping strategies, and interpret simple case situations. Analyze: Compare different therapeutic approaches in terms of their techniques, effectiveness, and suitability for different psychological disorders.
	September	TERM I EXAMINATION	