



**DELHI PUBLIC SCHOOL
RUBY PARK, KOLKATA**



SYLLABUS

Class 12



ENGLISH Session: 2023-24

MONTH	UNIT	READING SKILLS / ASL	WRITING SKILLS	LITERATURE	
APRIL	1	Comprehension exercises from Literary Passages	Formal Invitation	My Mother at Sixty-Six (poem) The Last Lesson	
	2	Case based passages	Informal Invitation	Lost Spring	
	3		Replies to Invitation Notice writing		
MAY	4	ASL	Notice Writing	Deep Water The Tiger King	
UNIT TEST 1					
JUNE	5	ASL	Notice Writing	Keeping Quiet (poem) The Rattrap	
	6	Comprehension from Discursive Passages		Letter to the Editor	Journey to the End of the Earth Indigo
JULY	7		A Thing of Beauty (poem) The Enemy		
	UNIT TEST 2				
AUGUST	8	Inference from Context	Job Application	Going Places On the Face of It	
	9	Comprehension from Factual Passages		Poets and Pancakes The Interview	
SEPTEMBER	10	BLOCK TEST			
OCTOBER	11	Comprehension from Analytical Passages		Job Application	Memories of Childhood
NOVEMBER	12	ASL	Letter to the Editor	A Roadside Stand (poem) Aunt Jennifer's Tigers (poem)	
NOVEMBER & DECEMBER	PRE BOARD EXAMINATION				

Pre Board Syllabus as prescribed by CBSE





BIOLOGY

Session: 2023-24

MONTH	UNIT	NAME OF THE CHAPTERS
APRIL	REPRODUCTION	SEXUAL REPRODUCTION IN FLOWERING PLANTS
MAY	REPRODUCTION	HUMAN REPRODUCTION
		REPRODUCTIVE HEALTH- INTRODUCTION
UNIT TEST I		
JUNE	REPRODUCTION	REPRODUCTIVE HEALTH - CONTINUED
	GENETICS AND EVOLUTION	PRINCIPLES OF INHERITANCE AND VARIATION
JULY	GENETICS AND EVOLUTION	MOLECULAR BASIS OF INHERITANCE
		THEORY OF EVIDENCES OF EVOLUTION
	BIOLOGY IN HUMAN WELFARE	MICROBES IN HUMAN WELFARE - INTRODUCTION
UNIT TEST II		
AUGUST	BIOLOGY IN HUMAN WELFARE	MICROBES IN HUMAN WELFARE CONTINUED
		HUMAN HEALTH AND DISEASES - INTRODUCTION
SEPTEMBER	BIOLOGY IN HUMAN WELFARE	HUMAN HEALTH AND DISEASES- CONTINUED
BLOCK TEST I		
OCTOBER	BIOTECHNOLOGY	BIOTECHNOLOGY: PRINCIPLES AND PROCESS
NOVEMBER	BIOTECHNOLOGY	BIOTECHNOLOGY AND ITS APPLICATION
	ECOLOGY	ORGANISMS AND POPULATION
		ECOSYSTEMS
		BIODIVERSITY AND CONSERVATION
DECEMBER	PRE BOARD EXAMINATION	

Pre Board Syllabus as prescribed by CBSE



**MATHEMATICS** Session: 2023-24

MONTHS	TOPICS	SUBTOPICS
APRIL	Relations and Functions	Types of relations: reflexive, symmetric, transitive and equivalence relations.
		One to one and onto functions.
	Inverse Trigonometric Functions	Definition, range, domain, principal value branch.
		Graphs of inverse trigonometric functions.
MAY-JUNE	Continuity	Continuity
	Differentiability	Differentiability, chain rule, derivative of inverse trigonometric functions, like $\sin^{-1} x$, $\cos^{-1} x$ and $\tan^{-1} x$, derivative of implicit functions. Concept of exponential and logarithmic functions. Derivatives of logarithmic and exponential functions. Logarithmic differentiation, derivative of functions expressed in parametric forms.
		UNIT TEST 1
	Differentiability	Second order derivatives.
	Applications of Derivatives	Applications of derivatives: rate of change of quantities, increasing/ decreasing functions,
JULY	Applications of Derivatives	maxima and minima (first derivative test motivated geometrically and second derivative test given as a provable tool). Simple problems (that illustrate basic principles and understanding of the subject as well as real life situations).
JULY	Matrices and Determinants	Concept, notation, order, equality, types of matrices, zero and identity matrix, transpose of a matrix, symmetric and skew symmetric matrices. Operations on matrices: Addition and multiplication and multiplication with a scalar. Simple properties of addition, multiplication and scalar multiplication. Noncommutativity of multiplication of matrices and existence of non-zero matrices whose product is the zero matrix (restrict to square matrices of order 2). Invertible matrices and proof of the uniqueness of inverse, if it exists; (Here all matrices will have real entries).
		Determinant of a square matrix (up to 3×3 matrices), minors, co-factors and applications of determinants in finding the area of a triangle. Adjoint and inverse of a square matrix. Consistency, inconsistency and number of solutions of system of linear equations by examples, solving system of linear equations in two or three variables (having unique solution) using inverse of a matrix



MATHEMATICS

Session: 2023-24

contd.

MONTHS	TOPICS	SUBTOPICS
JULY	UNIT TEST 2	
	Linear Programming	Introduction, related terminology such as constraints, objective function, optimization,
		Graphical method of solution for problems in two variables, feasible and infeasible regions (bounded or unbounded), feasible and infeasible solutions, optimal feasible solutions (up to three non-trivial constraints).
AUGUST	Integrals	Indefinite Integrals: Integration as inverse process of differentiation. Integration of a variety of functions by substitution, by partial fractions and by parts, Evaluation of simple integrals of the following types and problems based on them.
		$\int \frac{dx}{x^2 \pm a^2}, \int \frac{dx}{\sqrt{x^2 \pm a^2}}, \int \frac{dx}{\sqrt{a^2 - x^2}}, \int \frac{dx}{ax^2 + bx + c},$ $\int \frac{dx}{\sqrt{ax^2 + bx + c}}, \int \frac{px + q}{ax^2 + bx + c} dx, \int \frac{px + q}{\sqrt{ax^2 + bx + c}} dx,$ $\int \sqrt{a^2 \pm x^2} dx, \int \sqrt{x^2 - a^2} dx, \int \sqrt{ax^2 + bx + c} dx$
SEPTEMBER	BLOCK TEST 1	
SEPTEMBER	Integrals	Definite Integrals: Fundamental Theorem of Calculus (without proof). Basic properties of definite integrals and evaluation of definite integrals
OCTOBER	Probability	Conditional probability, multiplication theorem on probability, independent events, total probability, Bayes' theorem, Random variable and its probability distribution, mean of random variable.
	Applications of the Integrals	Applications in finding the area under simple curves, especially lines, circles/ parabolas/ellipses (in standard form only)
OCTOBER-NOVEMBER	Differential Equations	Definition, order and degree, general and particular solutions of a differential equation. Solution of differential equations by method of separation of variables, solutions of homogeneous differential equations of first order and first degree. Solutions of linear differential equation of the type: $\frac{dy}{dx} + py = q$, where p and q are functions of x or constants. $\frac{dx}{dy} + px = q$, where p and q are functions of y or constants





MATHEMATICS

Session: 2023-24

contd.

MONTHS	TOPICS	SUBTOPICS
NOVEMBER	Vectors	Vectors and scalars, magnitude and direction of a vector. Direction cosines and direction ratios of a vector. Types of vectors (equal, unit, zero, parallel and collinear vectors), position vector of a point, negative of a vector, components of a vector, addition of vectors, multiplication of a vector by a scalar, position vector of a point dividing a line segment in a given ratio. Definition, Geometrical Interpretation, properties and application of scalar (dot) product of vectors, vector (cross) product of vectors.
	Three-dimensional Geometry	Direction cosines and direction ratios of a line joining two points. Cartesian equation and vector equation of a line, skew lines, shortest distance between two lines. Angle between two lines.
DECEMBER	PREBOARD	

Pre Board Syllabus as prescribed by CBSE



PHYSICS Session: 2023-24

MONTH	CHAPTER	TOPICS	SUB TOPICS
APRIL	I & II	ELECTROSTATICS	Electric charges and their conservation. Coulomb's law - force between two point charges, forces between multiple charges; superposition principle and continuous charge distribution.
			Electric field, electric field due to a point charge, electric field lines; electric dipole, electric field due to a dipole; torque on a dipole in a uniform electric field.
			Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside).
			Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges; equipotential surfaces, electrical potential energy of a system of two point charges and of electric dipoles in an electrostatic field.
			Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and electric polarisation, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with and without dielectric medium between the plates, energy stored in a capacitor(no derivation, formulae only)
MAY AND JUNE	IX	RAY OPTICS	Reflection of light, spherical mirrors, mirror formula. Refraction of light, total internal reflection and optical fibres, refraction at spherical surfaces, lenses, thin lens formula, lens-maker's formula. Magnification, power of a lens, combination of thin lenses in contact.
			Refraction of light through a prism.
			Optical instruments: Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers.
	III	CURRENT ELECTRICITY	Electric current, flow of electric charges in a metallic conductor, drift velocity and mobility, and their relation with electric current; Ohm's law, V-I characteristics (linear and non-linear), electrical energy and power, electrical resistivity and conductivity. Temperature dependence of resistance.
Internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel.			
Kirchhoff 's laws . Wheatstone bridge			
UNIT TEST 1			



**PHYSICS** Session: 2023-24*contd.*

MONTH	CHAPTER	TOPICS	SUB TOPICS
JUNE AND JULY	IV & V	Magnetic Effects of Current and Magnetism	Concept of magnetic field, Oersted's experiment. Biot - Savart law and its application to current carrying circular loop. Ampere's law and its applications to infinitely long straight wire, straight solenoid (only qualitative treatment). Force on a moving charge in uniform magnetic and electric fields. Force on a current-carrying conductor in a uniform magnetic field. Force between two parallel current-carrying conductors- definition of ampere. Torque experienced by a current loop in a uniform magnetic field; current loop as a magnetic dipole and its magnetic dipole moment. Moving coil galvanometer-its current and voltage sensitivity and conversion to ammeter and voltmeter.
			Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only). Magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis (qualitative treatment only). Torque on a magnetic dipole (bar magnet) in a uniform magnetic field (qualitative treatment only); magnetic field lines.
	VI & VII	Electromagnetic Induction and Alternating Currents	Magnetic properties of materials- Para-, dia- and ferro - magnetic substances, with examples. Magnetisation of materials; Effect of temperature on Magnetic Properties.
Electromagnetic induction; Faraday's law, induced emf and current; Lenz's Law, Self and mutual inductance.			
UNIT TEST 2			
AUGUST	VIII	Electromagnetic Waves	Basic idea of displacement current, Electromagnetic waves and their characteristics, their transverse nature (qualitative ideas only). Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, x-rays, gamma rays) including elementary facts about their uses.





PHYSICS

Session: 2023-24

contd.

MONTH	CHAPTER	TOPICS	SUB TOPICS
AUGUST	X	WAVE OPTICS	Wavefront and Huygens' principle, reflection and refraction of plane wave at a plane surface using wavefronts. Proof of laws of reflection and refraction using Huygens' principle. Interference, Young's double slit experiment and expression for fringe width (No derivation final expression only), coherent sources and sustained interference of light. Diffraction due to a single slit, width of central maximum (qualitative treatment only).
SEPTEMBER	BLOCK TEST 1		
	XI	Photoelectric Effect (Dual nature of radiation and matter)	Dual nature of radiation, Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation - particle nature of light. Experimental Study of Photoelectric Effect. Matter waves - wave nature of particles, de Broglie relation.
OCTOBER	XII & XIII	ATOMS AND NUCLEI	Alpha - particle scattering experiment; Rutherford's model of atom; Bohr model of Hydrogen atom, expression of radius of nth possible orbit, velocity and energy of electron in this orbit of Hydrogen line spectra (qualitative treatment only). Composition and size of nucleus, nuclear force, Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission and fusion.
NOVEMBER	XIV	ELECTRONIC DEVICES	Energy Bands in conductors, Semiconductors and insulators (qualitative treatment only), intrinsic and extrinsic semi conductors, p type and n type, pn junction; semiconductor diode - I-V characteristics in forward and reverse bias, diode as a rectifier;
NOVEMBER AND DECEMBER	PREBOARD EXAMINATION		
	PREBOARD EXAMINATION		

Pre Board Syllabus as prescribed by CBSE



**CHEMISTRY** Session: 2023-24

MONTH	CHAPTER NO.	CHAPTER	CONTENTS
APRIL	I	SOLUTIONS	<ul style="list-style-type: none"> Types of solutions. Expression of concentration of solutions of solids in liquids Solubility of gases in liquid, solid in liquid. Colligative properties: relative lowering of vapour pressure, Raoult's law, elevation of boiling point, depression of freezing point, osmotic pressure Determination of molecular masses using colligative properties Abnormal molecular mass, Vant Hoff factor
MAY	II	ELECTROCHEMISTRY	<ul style="list-style-type: none"> EMF of a cell, standard electrode potential Nernst equation and its application to chemical cells. Relation between Gibbs energy change and EMF of a cell. Conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration. Kohlrausch's Law. Electrolysis and laws of electrolysis (elementary idea) Electrolytic cells and Galvanic cells, Lead accumulator Dry cell, Fuel cells; corrosion.
	111	CHEMICAL KINETICS	<ul style="list-style-type: none"> Rate of a reaction (average and instantaneous) Factors affecting rates of reaction. Order and molecularity of a reaction Rate law and specific rate constant, integrated rate equations and half life (only for zero and first order reactions)
JUNE	UNIT TEST - I		
	111	CHEMICAL KINETICS (contd.)	<ul style="list-style-type: none"> Activation energy, Arrhenius equation Concept of collision theory (elementary idea, no mathematical treatment)
	VI	HALOALKANES & HALOARENES	<ul style="list-style-type: none"> Haloalkanes: Nomenclature, nature of C-X bond, physical and chemical properties, mechanism of substitution reactions. Optical isomerism.
JULY	VI	HALOALKANES & HALOARENES (contd.)	<ul style="list-style-type: none"> Haloarenes: Nature of C-X bond, substitution reactions (directive influence of halogen formonosubstituted compounds only). Uses and environmental effects of - dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT.



**CHEMISTRY** Session: 2023-24*contd.*

MONTH	CHAPTER NO.	CHAPTER	CONTENTS
JULY	VII	ALCOHOLS, PHENOLS AND ETHERS	<ul style="list-style-type: none"> Alcohols: Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only); identification of primary, secondary and tertiary alcohols; mechanism of dehydration, uses, with special reference to methanol and ethanol. Phenols: Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophilic substitution reactions, uses of phenols. Ethers: Nomenclature, methods of preparation, physical and chemical properties, uses.
	UNIT TEST - II		
AUGUST	VIII	ALDEHYDES, KETONES and CARBOXYLIC ACIDS	<ul style="list-style-type: none"> Aldehydes and Ketones: Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties, and mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes; uses. Carboxylic Acids: Nomenclature, acidic nature, methods of preparation, physical and chemical properties; uses
	IX	AMINES	<ul style="list-style-type: none"> Preparation, physical and chemical properties, uses, identification of primary secondary and tertiary amines. Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry.
SEPTEMBER	BLOCK TEST - I		
	IV	d -and f -BLOCK ELEMENTS	<ul style="list-style-type: none"> General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first row transition metals – metallic character, ionization enthalpy, oxidation states, ionic radii, colour, catalytic property, magnetic properties, interstitial compounds, alloy formation.
OCTOBER	IV	d -and f -BLOCK ELEMENTS (contd.)	<ul style="list-style-type: none"> Preparation and properties of $K_2Cr_2O_7$ and $KMnO_4$. Lanthanoids – electronic configuration, oxidation states, chemical reactivity and lanthanoid contraction and its consequences. Actinoids – Electronic configuration, oxidation states and comparison with lanthanoids .



**CHEMISTRY** Session: 2023-24*contd.*

MONTH	CHAPTER NO.	CHAPTER	CONTENTS
	V	COORDINATION COMPOUNDS	<ul style="list-style-type: none"> Coordination compounds : Introduction, Werner's theory, ligands, coordination number, colour, magnetic properties and shapes IUPAC nomenclature of mononuclear coordination compounds, isomerism (structural and stereo) Bonding, VBT, CFT Importance of coordination compounds (in qualitative analysis, extraction of metals and biological systems).
NOVEMBER	X	BIOMOLECULES	<ul style="list-style-type: none"> Carbohydrates – Classification (aldoses and ketoses), monosaccharide (glucose and fructose), D-Configuration, oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen): importance of carbohydrates. Proteins - Elementary idea of α-amino acids, peptide bond, polypeptides, proteins, primary structure, secondary structure, tertiary structure and quaternary structure (qualitative idea only), denaturation of proteins; enzymes. Vitamins – Classification and functions. Nucleic Acids: DNA and RNA
DECEMBER	PRE-BOARD EXAMINATION		

Pre-Board Syllabus for as prescribed by CBSE



ECONOMICS Session: 2023-24

MONTH	UNIT	TOPIC	SUB-TOPIC
APRIL	PART A (MACROECONOMICS) UNIT 1	NATIONAL INCOME AND RELATED AGGREGATES	Meaning, basic concepts in Macroeconomics. Capital goods, consumption goods, final goods, intermediate goods, gross investment, depreciation, concepts of stock and flow
			Gross investment and depreciation. Circular flow of income in two-sector economy, methods of calculating national income- value-added, income and expenditure methods. Aggregates related to national income. Real and Nominal GDP, GDP Deflator, GDP and welfare.
MAY	PART B (INDIAN ECONOMIC DEVELOPMENT), UNIT 6	DEVELOPMENT EXPERIENCE (1947-1990 AND ECONOMIC REFORMS SINCE 1991	Indian economy on the eve of independence. Indian economic system and the common goals of the five-year plans. Problems and policies of agriculture- institutional reforms and new agricultural strategy, Industrial Policy Resolution of 1956, Foreign Trade. Features and appraisals of Liberalization, privatization and globalization.
JUNE	UNIT TEST 1		
	PART B (INDIAN ECONOMIC DEVELOPMENT), UNIT 6 PART A (MACROECONOMICS), UNIT 2	DEVELOPMENT EXPERIENCE (1947-1990) AND ECONOMIC REFORMS SINCE 1991. MONEY AND BANKING	Concepts of demonetization and GST. Meaning, functions and supply of money-currency held by public and demand deposits held by Commercial Banks, Money creation by Commercial Banks. Central Bank and its functions, credit control through Bank rate, Repo rate, Reverse repo rate, Open market operations, CRR, SLR, Margin requirement of loan.
JULY	PART B (INDIAN ECONOMIC DEVELOPMENT), UNIT 7	CURRENT CHALLENGES FACING INDIAN ECONOMY- HUMAN CAPITAL FORMATION, RURAL DEVELOPMENT, EMPLOYMENT	How people become resource, role of human capital in economic development and growth of education sector in India. Credit and marketing in rural India, key issues, role of cooperatives, agricultural diversification, alternate farming-organic farming. Growth and changes in workforce participation rate in formal and informal sectors: problems and policies.
UNIT TEST 2			



ECONOMICS Session: 2023-24

contd.

MONTH	UNIT	TOPIC	SUB-TOPIC
AUGUST	PART A (MACROECONOMICS), UNIT 3, 4	GOVERNMENT BUDGET AND THE ECONOMY. DETERMINATION OF INCOME AND EMPLOYMENT	Meaning and objectives of Government Budget, components, classification of receipts- revenue receipts and capital receipts, classification of expenditure- revenue and capital expenditure. Balanced, surplus and deficit budget-measures of government deficits. Aggregate demand and its components, Propensity to consume and save, short-run equilibrium output, investment multiplier and its mechanism.
			Meaning of full employment and underemployment, problems of deficient and excess aggregate demand measures to correct them- changes in government spending, taxes and money supply.
SEPTEMBER	BLOCK TEST		
OCTOBER	PART B (INDIAN ECONOMIC DEVELOPMENT), UNIT 7, 8	SUSTAINABLE DEVELOPMENT. DEVELOPMENT EXPERIENCE OF INDIA- A COMPARISON WITH NEIGHBORS	Meaning, effects of economic development on resources and environment and global warming. Comparison of India with China and Pakistan on issues of economic growth, population, sectoral development and other human development indicators.
NOVEMBER	PART A (MACROECONOMICS), UNIT 5	BALANCE OF PAYMENTS AND FOREIGN EXCHANGE RATE	Balance of payments-meaning and components. Surplus and deficit balance of payments. Foreign exchange rate- meaning of fixed and flexible and managed floating. Determination of exchange rate in a free market, merits and demerits of fixed and flexible exchange rate. Managed Floating exchange rate.
NOVEMBER & DECEMBER	PRE-BOARD		

Pre-Board Syllabus for as prescribed by CBSE



ACCOUNTANCY Session: 2023-24

MONTH	TOPIC	SUB TOPIC
APRIL	Company Accounts	Issue of Shares at Par and Premium and consideration other than cash
		Calls in Arrear, Calls in Advance and Over Subscription
		Forfeiture of shares issued at par and premium and there subsequent reissue. Oversubscription with Forfeiture
		Balance Sheet Representation as per Schedule III of Companies Act 2013 of Shareholders Fund (including prorata)
	Company Accounts	Prorata allotment and balance sheet representation continued
		Issue of Debentures - Issued at Par, Premium and Discount, Issue of Debentures as Collateral Securities and Issue of Debentures for consideration other than cash. Writing off of interest on Debentures
	Analysis of Financial Statements	Financial Statements of Company (Representation of Balance Sheet and Statement of Profit and Loss according to Schedule III)
MAY	Analysis of Financial Statements	Comparative Statement and Common size statement. Ratio Analysis - Liquidity, Solvency ratios
UNIT TEST 1		
JUNE	Analysis of Financial Statements	Ratio Analysis-Activity and Profitability Ratios
		Cash Flow Statement
JULY	Financial statement Analysis	Cash Flow Statement
	Partnership	Fundamentals of Partnership - Theory, P/L Appropriation Account, Interest on Capital, Interest on Drawings, Fluctuating and Fixed Capital Accounts, Rectification of Closed Accounts and Guarantee of Minimum Share of Profit
		UNIT TEST 2





ACCOUNTANCY

Session: 2023-24

contd.

MONTH	TOPIC	SUB TOPIC
AUGUST	Partnership	Change in Profit Sharing Ratio among existing Partners - Calculation of Sacrificing and Gaining Ratio, Valuation of Goodwill, Treatment of Goodwill, Treatment of Reserves and Accumulated Profits and Revaluation of Assets and Liabilities. Including preparation of new balance sheet.
SEPTEMBER	BLOCK TEST 1	
	Partnership	Admission of a Partner - Premium for Goodwill and preparation of Revaluation Account, Partners Capital Account and Balance Sheet of reconstituted firm along with Hidden Goodwill
OCTOBER	Partnership	Adjustment of Capital in admission of a partner
		Retirement of a Partner along with Partner's Loan Account and Death of a Partner along with Executor's Loan Account
NOVEMBER	Partnership	Dissolution of a firm along with Memorandum Balance Sheet and Journal Entries.
	PREBOARD	

Pre-Board Syllabus for as prescribed by CBSE





BUSINESS STUDIES

Session: 2023-24

MONTH	TOPIC	SUB TOPIC
APRIL	Nature and Significance of Management	Characteristics and Objectives Of management, Nature and levels of Management
		Functions of Management and Coordination
	Principles of Management	Nature of Pinciples of Management, Importance of Principles of Management and Fayol's Principle
	Principles of Management	Fayol's Principal Contd and Taylor's Principles and Technique and Comparison between Taylor and Fayol
	Business Environment	Introduction of Business Environment, Features and Importance, Dimensions of business environment
Dimensions of business environment, Demonetisation- concept and importance, Demonetisation		
	Marketing Management	Marketing Management - Meaning, Functions and Marketing Philosophies and Marketing Mix Introduction
MAY	Marketing Management	Marketing Mix -Product, Price, Place and Promotion along with Public Relations
UNIT TEST 1		
JUNE	Financial Management	Definition of Financial Management, Three important decisions- Meaning and Factors effecting the same. Financial Planning- Objectives and Importance, Capital structure concept and factors affecting Capital structure
JULY	Financial Management	Trading on Equity - its mathematical proof. Fixed and Working Capital and factors affecting Fixed and Working capital
	Financial Markets	Concept, Types, Money market and its instruments, Distinction between Money Market and Capital Market, Stock Exchange and its Function and Trading Procedure and Securities and Exchange Board of India - Objectives and functions
UNIT TEST 2		
AUGUST	Consumer Protection	Concept and Importance, Consumer Protection Act 2019 , Role of NGO's and Non-Governmental organisations
	Planning	Concept and Importance, Limitations, Planning Process and Types of Plans





BUSINESS STUDIES

Session: 2023-24

contd.

MONTH	TOPIC	SUB TOPIC
AUGUST	Organising	Concept and Importance, Organising Process, Structure of Organisation - Divisional and Functional Structure, Types of Organising, Formal and Informal, Delegation and Decentralisation-Concept, Elements Importance
BLOCK TEST I		
SEPTEMBER	Organising	Delegation and Decentralisation- Concept , Importance and Elements
OCTOBER	Staffing	Concept and Importance, Staffing as a part of HRM, Staffing Process and Sources of Recruitment - Internal and External - Merits and Demerits
		Selection Process, Training and Development - Concept, Importance and Methods
	Directing	Concepts , Importance and Elements. Motivation- Concept , Maslow's Theory and Financial and Non-Financial Incentives , Leadership - Concepts, Styles of Leadership, Communication - Concept, Formal and Informal Communication, Barriers to Communication and how to overcome Barriers to Communication
NOVEMBER	Controlling	Concept, Importance, Process of Controlling, Relationship between Planning and Controlling.
PRE-BOARD		

Pre-Board Syllabus for as prescribed by CBSE



COMPUTER SCIENCE

Session: 2023-24

MONTH	TOPIC	SUB-TOPIC
APRIL	Python Revision Tour	Tokens in Python
		Variables and Assignments
		Simple Input and Output
		Data Types
		Mutable and Immutable Types
		Expressions
		Statement Flow Control
		Looping Statements
	Python Revision Tour-II	Strings in Python
		Lists in Python
Tuples in Python		
Dictionaries in Python		
	Sorting Techniques	
MAY	Working with Functions	Types of function (built-in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope)
UNIT TEST - 1		
JUNE	Using Python Libraries	Creating python libraries
JULY	File Handling	Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths
		Text file: opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause, writing/appending data to a text file using write() and writelines(), reading from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of data in a text file
		Binary file: basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file
	Exception Handling	Introduction, handling exception using try-catch-finally blocks
UNIT TEST - 2		
AUGUST	Data Structures: Linear Lists	Stack, operations on stack (push & pop), implementation of stack using list. Introduction to queue, operations on queue (enqueue, dequeue, is empty, peek, is full), implementation of queue using list.





COMPUTER SCIENCE

Session: 2023-24

contd.

MONTH	TOPIC	SUB-TOPIC
AUGUST	Database Management	Database concepts: introduction to database concepts and its need Relational data model: relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key)
	Database Management	Structured Query Language: introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database, show tables, create table, describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical), aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command, aggregate functions (max, min, avg, sum, count), group by, having clause, joins: cartesian product on two tables, equi-join and natural join
BLOCK TEST - I		
OCTOBER	Interface Python with MySQL	Connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using fetchone(), fetchall(), rowcount, creating database connectivity applications
NOVEMBER	Computer Networks	Evolution of networking: introduction to computer networks, evolution of networking (ARPANET, NSFNET, INTERNET)
		Data communication terminologies: concept of communication, components of data communication (sender, receiver, message, communication media, protocols), measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuit switching, Packet switching)
		Transmission media: Wired communication media (Twisted pair cable, Co-axial cable, Fiber-optic cable), Wireless media (Radio waves, Micro waves, Infrared waves)
		Network devices (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card)
		Network topologies and Network types: types of networks (PAN, LAN, MAN, WAN), networking topologies (Bus, Star, Tree)
		Network protocol: HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP, wireless/mobile communication protocol such as GSM, GPRS and WLL
		Mobile telecommunication technologies: 1G, 2G, 3G, 4G and 5G
Introduction to web services: WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting		
DECEMBER	PRE BOARD EXAMINATION	

Pre-Board Syllabus for as prescribed by CBSE



ENTREPRENEURSHIP

Session: 2023-24

MONTH	TOPIC	SUB TOPIC
APRIL	Entrepreneurial Opportunity	1. Elements of Business opportunity
		2. Factors involved in sensing opportunity
		3. Concept of environmental scanning
		4. Factors affecting business environment
		5. Meaning of idea fields
		6. Various sources of idea fields
		7. Technique of transformation of ideas into opportunities
		8. Understanding trend spotting
		9. Creative and innovative processes
MAY	Enterprise Planning	1. Type of economic activities
		2. Forms of business organizations
		3. Business Plan
		4. Format of Business Plan
		5. Formalities required for starting a business
UNIT TEST 1		
JUNE	Enterprise Marketing	1. What are Goal setting and Smart Goals
		2. Various marketing strategies used in a firm
		3. Understanding in detail 4P's in marketing
		4. Understanding the concepts of Brand, Logo and Tagline
JULY		5. Meaning and methods of negotiation
		6. Understanding the importance of employees, customer and vendor
		7. Understanding the importance of quality in customer satisfaction
		8. Various reasons for business failures
	Enterprise Growth Strategies	1. Detail about franchising and its types
		2. How growth of firm possible through merger and acquisition
UNIT TEST 2		



**ENTREPRENEURSHIP** Session: 2023-24*contd.*

MONTH	TOPIC	SUB TOPIC
AUGUST	Enterprise Growth Strategies	3.Types and meaning of mergers and acquisitions
		4. Understand the reasons for mergers and acquisitions
		5.Understand the reasons for failure of mergers and acquisitions
		6.Concept of value addition
		7. Meaning of value chain and requirement of value chain management
BLOCK TEST		
SEPTEMBER	Business Arithmetic	1. Concept of Unit price, Break even point and its calculations
OCTOBER		3.Meaning of Inventory control and E.O.Q
		4. Meaning of cash flow projection and concept of working capital
		6. Terminologies of Financial management and budgets
		7. Concept and calculation of Return on Investment and Return on Equity
NOVEMBER	Resource Mobilisation	1.Understand the need of finance in Business
		2. Discuss the various sources of funds required for a firm
		3. Understand the ways of raising funds in primary market
		4. Angel Investors and Venture capitalists- Features and funding
PRE-BOARD EXAM		

Pre-Board Syllabus for as prescribed by CBSE



INFORMATICS PRACTICES

Session: 2023-24

MONTH	TOPIC	SUB TOPIC
APRIL	Data Handling using Pandas -I	Introduction to Python libraries- Pandas, Matplotlib. Data structures in Pandas - Series and data frames. Series: Creation of series from ndarray, scalar value; Series: Creation of series from dictionary Mathematical operations
		Series attributes, head and tail functions; selection. Series indexing and slicing.
	Societal Impact	Digital footprint, net and communication etiquettes, data protection, intellectual property rights (IPR), plagiarism, licensing and copyright, free and open source software (FOSS)
		Cybercrime and cyber laws, hacking, phishing, cyber bullying, overview of Indian IT Act.
MAY	Societal Impact	E-waste: hazards and management. Awareness about health concerns related to the usage of technology.
UNIT TEST - 1		
JUNE	Data handling using Pandas-I	Data Frames: creation of data frames from dictionary of series Data Frames: creation of data frames from list of dictionaries, display, iteration. Operations on rows and columns: add add (insert /append), select, delete (drop column and row)
		Data Frames: rename, Head and Tail functions, indexing using labels Importing/Exporting Data between CSV files and Data Frames.
		Purpose of plotting, drawing and saving of plots using Matplotlib (line plot) Purpose of plotting, drawing and saving of plots using Matplotlib (bar graph, histogram).
JULY	Data Visualization	Customizing plots: color, style (dashed, dotted), width; adding label, title, and legend in plots.
UNIT TEST - 2		
JULY	Database Query using SQL	Database Concepts: Introduction to database concepts and its need, Database Management System. Relational data model: concept of attribute, domain, tuple, relation, candidate key, primary key, alternate key, foreign key.





INFORMATICS PRACTICES

Session: 2023-24

contd.

MONTH	TOPIC	SUB TOPIC
JULY	Database Query using SQL	Structured Query Language: Data Definition Language, Data Query Language and Data Manipulation Language, Introduction to MySQL: Creating a database, using database, showing tables using MySQL, Data Types : char, varchar, int, float, date Data Definition Commands: CREATE, DROP, ALTER (Add and Remove primary key, attribute).
AUGUST	Database Query using SQL	Data Query Commands: SELECT-FROM- WHERE, LIKE, BETWEEN, IN, ORDER BY, using arithmetic, logical, relational operators and NULL values in queries, Distinct clause Data Manipulation Commands: INSERT, UPDATE, DELETE.
		Math functions: POWER (), ROUND (), MOD (). Text functions: UCASE ()/UPPER (), LCASE ()/LOWER (), MID ()/SUBSTRING ()/SUBSTR (), LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM (). Date Functions: NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (), DAYNAME ().
		Aggregate Functions: MAX (), MIN (), AVG (), SUM (), COUNT (); using COUNT (*).
		Querying and manipulating data using Group by, Having, Order by. Operations on Relations - Union, Intersection, Minus, Cartesian Product, JOIN (Cartesian Join, Equi Join, Natural Join)
BLOCK TEST - I		
SEPTEMBER	Introduction to Computer Networks	Introduction to networks, Types of network: LAN, MAN, WAN. Network Devices: modem, hub, switch, repeater, router, gateway
OCTOBER		Network Topologies: Star, Bus, Tree, Mesh.
		Introduction to Internet, URL, WWW and its applications- Web, email, Chat, VoIP. Website: Introduction, difference between a website and webpage, static vs dynamic web page, web server and hosting of a website.
NOVEMBER		Web Browsers: Introduction, commonly used browsers, browser settings, add-ons and plug-ins, cookies.
DECEMBER	PRE BOARD EXAMINATION	

Pre-Board Syllabus for as prescribed by CBSE



GEOGRAPHY

Session: 2023-24

MONTH	UNIT	TOPIC	SUB TOPIC
APRIL	I	Human Geography	Nature and scope
MAY	II A	People	Population-distribution, density and growth. Population change-Components of population change, Demographic transition.
JUNE	II B	People	Human development - concept; selected indicators, international comparisons
UNIT TEST 1			
JULY	III A	Human Activities	Primary activities - concept and changing trends; gathering, pastoral, mining, subsistence agriculture, modern agriculture; people engaged in agricultural and allied activities - some examples from selected countries
	III B	Human Activities	Secondary activities-concept; manufacturing: types - household, small scale, large scale; agro based and mineral based industries; people engaged in secondary activities - some examples from selected countries
	III C	Human Activities	Tertiary Activities-Concept; Trade, Transport And Tourism; Services; People Engaged In Tertiary Activities - Some Examples From Selected Countries
UNIT TEST 2			
AUGUST AND SEPTEMBER	III D	Human Activities	Quaternary Activities-Concept; People Engaged In Quaternary Activities - Case Study From Selected Countries
	IV A	Transport, Communication and Trade	Land Transport - Roads, Railways; Trans- Continental Railways. Water Transport- Inland Waterways; Major Ocean Routes. Air Transport- Intercontinental Air Routes. Oil And Gas Pipelines. Satellite Communication And Cyber Space- Importance And Usage For Geographical Information; Use Of GPS.
BLOCK TEST 1			
OCTOBER AND NOVEMBER	V	International Trade	International Trade- Bases And Changing Patterns; Ports As Gateways Of International Trade; Role Of WTO in International Trade
DECEMBER	PRE BOARD		

Pre-Board Syllabus As Per CBSE Specification



GEOGRAPHY

Session: 2023-24

contd.

INDIA PEOPLE AND ECONOMY [PART B]			
MONTH	UNIT	TOPIC	SUB TOPIC
APRIL	VI A	People	Population: distribution, density and growth; composition of population - linguistic, religious; sex, rural-urban and occupational-regional variations in growth of population.
MAY AND JUNE	VII	Human Settlements	Rural settlements - types and distribution. Urban settlements - types, distribution and functional classification.
UNIT TEST 1			
JULY	VIII A	Resources And Development	Land resources- general land use; agricultural land use; geographical conditions and distribution of major crops (Wheat, Rice, Tea, Coffee, Cotton, Jute, Sugarcane and Rubber); agricultural development and problems
	VIII B	Resources And Development	Water Resources-Availability And Utilization-Irrigation, Domestic, Industrial And Other Uses; Scarcity Of Water And Conservation Methods- Rain Water Harvesting And Watershed Management
UNIT TEST 2			
AUGUST - SEPTEMBER	VIII C	Resources And Development	Mineral and energy resources- distribution of metallic (Iron ore, Copper, Bauxite, Manganese); non-metallic (Mica, Salt) minerals; conventional (Coal, Petroleum, Natural gas and Hydroelectricity) and non-conventional energy sources (solar, wind, biogas) and conservation
	VIII D	Resources and Development	Planning in India- target group area planning (case study); idea of sustainable development (case study)
BLOCK TEST 1			
OCTOBER	IX	Transport Communication	Transport and communication-roads, railways, waterways and airways: oil and gas pipelines; Geographical information and communication networks.
	X	International Trade	India's international trade in terms of volume, composition and direction.
NOVEMBER	X	Geographical Perspective On Selected Issues and Problems	Environmental pollution; urban-waste disposal. Urbanization, rural-urban migration; problems of slums. Land degradation.
DECEMBER	PRE BOARD		

Pre-Board Syllabus As Per CBSE Specification



HISTORY

Session: 2023-24

MONTH	UNIT	TOPIC
APRIL / MAY	1	The Story of the First Cities: Harappan Archaeology
	2	Political and Economic History: How Inscriptions tell a story
	3	Social Histories: Using the Mahabharata
JUNE	4	A History of Buddhism: Sanchi Stupa
	5	Medieval Society through Travelers' Accounts
UNIT TEST 1		
JULY	6	Religious Histories: The Bhakti and Sufi Tradition
	7	New Architecture: Hampi
UNIT TEST 2		
AUGUST	8	Agrarian Relations: The Ain-i-Akbari
	9	Colonialism and Rural Society: Evidence from Official Reports
SEPTEMBER	10	Representations of 1857
BLOCK TEST 1		
OCTOBER	11	Mahatma Gandhi through Contemporary Eyes
NOVEMBER	12	The Making of the Constitution
DECEMBER	PRE BOARD	

Pre-Board Syllabus As Per CBSE Specification



**POLITICAL SCIENCE** Session: 2023-24

MONTH	UNITS	BOOK 1 : CONTEMPORARY WORLD POLITICS	
		TOPIC	SUB - TOPIC
APRIL	1	The End of Bipolarity	The Soviet System, Gorbachev and disintegration, Disintegration of Soviet Union-Causes and Consequences, Shock Therapy; New entities in world politics, India- Russia relations
	2	Contemporary Centres of Power	Organisations: European Union, ASEAN, Nations: China, Japan and South Korea
APRIL	3	Contemporary South Asia	Military and Democracy in Pakistan and Bangladesh; Monarchy and Democracy in Nepal; Ethnic Conflict and Democracy in Sri Lanka, India-Pakistan Conflicts; India and its Neighbours; Peace and Cooperation
MAY- JUNE	4	International Organizations	Meaning and importance of International Organisations. Evolution of the UN, Structure and Functions of International Organisations, Principal Organs of UN, Reform of the UN, Reform of Structures, India and UN Reforms, Key Agencies, Future of International Organisations
	5	Security in Contemporary World	Security: Meaning and Types; Traditional and non-traditional concepts, new sources of threats, Cooperative Security, India's security Strategy
UNIT TEST 1			
JULY	6	Environment and Natural Resources	Environmental Concerns, Global Commons, Common but differentiated Responsibilities, India's Stand, Environmental Movements, Resource Geopolitics, Rights of Indigenous People
	7	Globalisation	Concept, Causes and Consequences, India and Globalisation, resistance to Globalisation, India and Resistance to Globalisation
UNIT TEST 2			
JULY - AUGUST	1	Challenges of Nation-Building	a) Challenges for the new Nation. Three Challenges. b) Partition: Displacement and Rehabilitation. Consequences of Partition. c) Integration of Princely States. d) Reorganisation of States.
	2	Era of One-Party Dominance	Challenges of Building Democracy; Congress dominance in the first three general elections. Nature of Congress dominance, Congress as social and ideological coalition. Tolerance and management of Factions Emergence of opposition parties.
	3	Politics of Planned Development	a) Political contestation. Ideas of Development. Planning, Planning Commission b) The Early Initiatives, The First Five Year Plan. Rapid Industrialisation.



POLITICAL SCIENCE Session: 2023-24

contd.

MONTH	UNITS	TOPIC	SUB -TOPIC
JULY - AUGUST	4	India's External Relations	a) International Context b) The Policy of NonAlignment, Nehru's role, Distance from two camps. Afro Asian Unity c) Peace and conflict with China-The Chinese Invasion 1962, War and Peace with Pakistan, Bangladesh War 1971 d) India's Nuclear Policy
SEPTEMBER - OCTOBER	5	Challenges to and Restoration of the Congress	a) Challenges of Political Succession- From Nehru to Shashtri, From Shastri to Indira Gandhi b) Fourth General Election 1967- Context of the Election, Non Congressism, Electoral Verdict, Coalitions, Defections c) Split in the Congress- Indira vs the Syndicate, Presidential Election 1969 d) The 1971 Election and Restoration of Congress- The outcome and after, Restoration?
	6	The Crisis of Democratic Order	a) Background to Emergency-Economic Context.-Gujarat and Bihar Movements- Conflict with Judiciary b) Declaration of Emergency-Crisis and response - Consequences c) Lessons of the Emergency. d) Politics after Emergency. - Lok Sabha Elections 1977, - Janata Government, - Legacy
BLOCK TEST 1			
OCTOBER - NOVEMBER	6	Regional Aspirations	a) Region and the Nation-Indian Approach, Areas of Tension, Jammu and Kashmir, Roots of the Problem, External and Internal disputes, Politics since 1948, Insurgency and After, 2022 and Beyond b) Punjab c) The Northeast- Demand for autonomy, Secessionist Movements, Movements against outsiders Assam and National integration
	7	Recent Development in Indian Politics	a) Context of 1990s b) Era of Coalition-Alliance Politics c) Political rise of the Backward Classes- Mandal Implemented, Political Fallouts d) Communalism, Secularism and Democracy.-Ayodhya Dispute, Demolition and after e) Emergence of New Consensus f) Lok Sabha Elections 2004 g) Growing Consensus
NOVEMBER DECEMBER	PRE-BOARDS		

Pre-Board Syllabus As Per CBSE Specification



PSYCHOLOGY

Session: 2023-24

MONTH	UNITS / CHAPTERS	TOPIC	SUB-TOPIC
MARCH & APRIL	4 & 5	Psychological Disorders and Therapeutic Approaches	Concept Of Abnormality: Factors and Models; Classification Of Disorders (DSM V, ICD 10), Characteristics Of Disorders, Major Psychological Disorders: Anxiety, Somatoform, Mood, Dissociative, Childhood Disruptive, Neuro-Developmental, Schizophrenia, Substance abuse. Therapeutic Approaches: Concept, Therapist-Client relationship; Types of Therapies: Psychodynamic, Cognitive Behaviour Therapy, Rational Emotive Therapy, Beck's Cognitive Therapy, Humanistic-Existential Therapy, Client-Centred Therapy, Rehabilitation of mentally ill.
		Project on Case Study	Introduction To Case Study, Format Of Data Taking Data Collection And Report Writing Guidelines
		Practical 1	Assessment of intelligence (IQ) of the subject through Raven's Progressive Matrices (RPM)
MAY & JUNE	1	Variations In Psychological Attributes	Individual Differences In Human Functioning Assessment Of Intelligence Theories Of Intelligence: Spearman, Alfred Binet, Thurstone, Howard Gardener, JP Guilford, Robert Sternberg, PASS model Measurement of Intelligence: Concept of IQ, Normal Probability Curve, Types of Intelligence tests, Mental Retardation and Intellectual Giftedness; Special Abilities-Aptitude, Creativity, Emotional Intelligence.
		Practical 2	To assess the adjustment pattern of the subject using the Global Adjustment scale
UNIT TEST 1			
JULY	2	Self And Personality	Personality Nature And Definition, Western and Indian perspective. Major Approaches -Types And Traits. Theories of personality- Psychoanalytic theory by Sigmund Freud, Neo- Freudian theories (Karen Horney, Carl G. Jung, Alfred Adler, Erik Erikson, Erik Fromm), Trait and Type theory (Cattell, Allport, Eysenck). Friedman and Rosenman's theory of types. Hippocrates and Ayurveda Classification. Approaches to Personality- Behavioural, Cultural and Humanistic. Assessment Of Personality-Self Report (EPQ-R, MMPI, 16PF), Behavioural Rating, Projective Techniques- TAT, Rorschach, DAP, sentence completion, Rosenzweig's picture frustration study.
		Practical 3	Assessment of personality of the subject using Eysenck personality questionnaire (EPQ-R)



**PSYCHOLOGY** Session: 2023-24*contd.*

MONTH	UNITS / CHAPTERS	TOPIC	SUB-TOPIC
UNIT TEST 2			
AUGUST	3	Meeting Life Challenges	Stress- Nature And Definition, Types of Stress:Physiological, Psychological,Environmental;Signs and Symptoms of stress, Effects Of Stress,General Adaptation Syndrome (GAS),Stress & Immune system,Coping with stress,Stress Management Techniques Promoting Positive Health And Wellbeing,Life Skills.
		Practical 4	Assessment of the self concept of the subject using the Self Concept Questionnaire(SCQ) by RK Saraswat.
SEPTEMBER	6	Attitude and Social Cognition	Explaining social behaviour,Nature & Components of attitude,Attitude formation and change,Attitude-Behaviour Relationship,Prejudice and Discrimination,Strategies for handling Prejudice
BLOCK TEST 1			
OCTOBER	7	Social influence and group processes	Nature of groups,Formation of groups, types of groups,Why people join groups,Formation of groups,Stages of group formation,Influence of groups on individuals:Social Loafing,Group Polarization,Bandwagon effect
		Practical 5	Assessment of Attitude of the subject using Sodhi's Attitude Scale
NOVEMBER & DECEMBER	PRE BOARDS		

Pre-Board Syllabus As Per CBSE Specification



PHYSICAL EDUCATION

Session: 2023-24

MONTH	UNIT	TOPIC	SUB TOPIC
APRIL	1	Management of Sporting Event	Function of Sports Events Management (Planning, Organising, Staffing, Directing & Controlling)
			Various Committees & their Responsibilities (Pre, During and Post)
			Fixture and its Procedures- Knock-Out (Bye & Seeding) & League (Staircase, Cyclic & tabular method) and Combination tournament
			Intramural & Extramural tournaments - Meaning, Objectives & Its Significance
			Community sports program (Sports Day, Health Run, Run for Fun, Run for Specific Cause & Run for Unity)
MAY	2	Children & Women in Sports	Exercise guidelines of WHO for different age groups.
			Common Postural Deformities - Knock Knee, Bow Legs, Flat Foot, Round Shoulders, Lordosis, Kyphosis and Scoliosis and their respective corrective measures.
			Women's participation in Sports - Physical, Psychological, and social benefits.
			Special consideration (Menarche & Menstrual Dysfunction)
			Female Athletes Triad (Osteoporosis, Amenorrhoea, Eating Disorders)
UNIT TEST 1			
JUNE	3	Yoga as Preventive measures for Lifestyle Disease	Obesity: Procedure, Benefits & Contraindications for Tadasana, Katichakrasana, Pavanmuktasana, Matsayasana, Halasana, Pachimottansana, Ardha - Matsyendrasana, Dhanurasana, Ushtrasana, Surya bhedana pranayama.
			Diabetes: Procedure, Benefits & Contraindications for Katichakrasana, Pavanmuktasana, Bhujangasana, Shalabhasana, Dhanurasana, Suptavajrasana, Paschimottanasana, Ardha-Matsyendrasana, Mandukasana, Gomukasana, Yogmudra, Ushtrasana, Kapalabhati.
			Asthma: Procedure, Benefits & Contraindications for Tadasana, Urdhva hasthasana, Uttana Mandukasana, Bhujangasana, Dhanurasana, Ushtrasana, Vakrasana, Kapalabhati, Gomukhasana, Matsyasana, Anuloma- Viloma
			Hypertension: Procedure, Benefits & Contraindications for Tadasana, Katichakrasana, Uttanpadasana, Ardha Halasana, Sarala Matyasana, Gomukhasana, UttanMandukasana, Vakrasana, Bhujangasana, Makarasana, Shavasana, Nadi- shodhanapranayam, Sitlipranayam.
			Back Pain and Arthritis: Procedure, Benefits & Contraindications of Tadasana, Urdhava hastotanasana, Ardh-Chakrasana, Ushtrasana, Vakrasana, Sarala Matsyendrasana, Bhujangasana, Gomukhasana, Bhadrasana, Makarasana, Nadi-shodhana pranayama



PHYSICAL EDUCATION

Session: 2023-24

contd.

MONTH	UNIT	TOPIC	SUB TOPIC
JULY	4	Physical Education & Sports For Cwsn (Children With Special Needs - Divyang)	Organizations promoting Disability Sports (Special Olympics; Paralympics; Deaflympics)
			Concept of Classification and Divisioning in Sports.
			Concept of Inclusion in sports, its need, and Implementation
			Advantages of Physical Activities for children with special needs
			Strategies to make Physical Activities assessable for children with special needs.
UNIT TEST 2			
JULY	5	Sports & Nutrition	Concept of balance diet and nutrition.
			Macro and Micro Nutrients; Food sources & functions.
			Nutritive & Non-Nutritive Components of Diet.
			Eating for Weight control - A Healthy Weight, The Pitfalls of Dieting, Food Intolerance, and Food Myths
			Importance of Diet in Sports-Pre, During and Post competition Requirements
AUGUST	6	Test & Measurement In Sports	Fitness Test- SAI Khelo India Fitness Test in school: <ul style="list-style-type: none"> ■ Age group 5-8 yrs/class 1-3: BMI, Flamingo Balance Test, Plate Tapping Test, ■ Age group 9-18 yrs/class 4-12: BMI, 50mt Speed test, 600 mt Run/ Walk, Sit & Reach flexibility test, Strength Test (Abdominal Partial Curl Up, Push-Ups for boys, Modified Push-Ups for girls).
			Measurement of Cardio- Vascular Fitness - Harvard Step Test - Duration of the Exercise in Seconds $\times 100 / 5.5 \times$ Pulse count of 1-1.5 Min after Exercise.
			Computing Basal Metabolic Rate (BMR)
			Rikli & Jones - Senior Citizen Fitness Test <ol style="list-style-type: none"> 1. Chair Stand Test for lower body strength 2. Arm Curl Test for upper body strength 3. Chair Sit & Reach Test for lower body flexibility 4. Back Scratch Test for upper body flexibility 5. Eight Foot Up & Go Test for agility 6. Six Minute Walk test for aerobic endurance
			Johnson- Methney test of motor educability (Front roll, Jumping half-turn, Jumping full turn.)



PHYSICAL EDUCATION

Session: 2023-24

contd.

MONTH	UNIT	TOPIC	SUB TOPIC
BLOCK TEST 1			
SEPTEMBER	7	Physiology & Injuries in Sports	Physiological factor determining component of Physical Fitness
			Effect of exercise on Muscular System
			Effect of exercise on Cardio - Respiratory System
			Physiological changes due to aging
			Sports injuries: Classification(Soft Tissue Injuries: (Abrasion, Contusion, Laceration, Incision, Sprain & Strain) Bone & Joint Injuries: (Dislocation, Fractures: Green Stick, Comminuted, Transverse Oblique & Impacted).
OCTOBER	8	Biomechanics & Sports	Newton's Law of Motion & its application in sports
			Types of Levers and their application in Sports.
			Equilibrium - Dynamic & Static and Centre of Gravity and its application in sports
			Friction & Sports
NOVEMBER/ DECEMBER	9	Psychology & Sports	Projectile in Sports.
			Personality; its definition & types (Jung Classification & Big Five Theory)
			Motivation, its type & techniques
			Exercise Adherence: Reasons, Benefits & Strategies for Enhancing it
			Meaning, Concept & Types of Aggressions in Sports
DECEMBER	10	Training In Sports	Psychological Attributes in Sports - Self Esteem, Mental Imagery, Self Talk, Goal setting
			Concept of Talent Identification and Talent Development in Sports.
			Introduction to Sports Training cycle - Micro, Meso, Macro Cycle.
			Types and Method to Develop - Strength, Endurance, and Speed
			Type and Method to Develop - Flexibility and Coordinative Ability.
Circuit Training - Introduction & its importance			

Pre-Board Syllabus As Per CBSE Specification



**LEGAL STUDIES** Session: 2023-24

MONTH	UNIT	TOPIC	SUB TOPIC
APRIL-MAY	1	Judiciary	i. Structure and Hierarchy of Courts and Legal Offices in India ii. Constitution, Roles and Impartiality iii. Appointments, Retirement and Removal of Judges iv. Tribunals v. Courts and Judicial Review
	2	Alternative Dispute Resolution in India (ADR)	i. Adversarial and Inquisitorial Systems ii. Meaning and scope of Alternative Dispute Resolution iii. Arbitration iv. Mediation v. Conciliation vi. Lok Adalats vii. Ombudsman viii. Lokpal and Lokayukta
	3	Topics of Law I (Business Law)	i. Law of Contracts ii. Law of Torts iii. Law of Property iv. Intellectual Property Law
UNIT TEST 1			
JUNE	4	Topics in Law II (General laws)	i. Law and Sustainable Development ii. Forms of Legal Entities iii. Criminal Laws in India
JULY	5	Concept of Human Rights	Human Rights in India i. Constitutional framework and Related laws in India- Human Rights in India; Preamble, Fundamental Rights, Fundamental Duties, Directive Principles of State Policy, Fundamental Duties Human Rights Violations- Complaint Mechanism (Quasi-Judicial bodies)- Quasi-Judicial Bodies- NHRC- National Commission for Minorities, NCW, National Commission for SCs and STs, NCPCR
UNIT TEST 2			
AUGUST	6	International Law	i. Introduction to International Law ii. Historical Evolution of International Law iii. What is International Law? iv. Sources of International Law



**LEGAL STUDIES**

Session: 2023-24

contd.

MONTH	UNIT	TOPIC	SUB TOPIC
AUGUST	6	International Law	v. International Human Rights vi. International law & Municipal Law vii. International Law & India viii. Dispute Resolution – ICJ, ICC and Other Dispute Resolution Mechanisms
SEPTEMBER	7	Legal Profession in India	i. The Advocates Act, 1961 ii. Lawyers and Professional Ethics iii. Advertising by Lawyers iv. Opportunities for Law graduates v. Legal Education in India vi. Liberalization and globalization of the Legal Profession vii. Women and Legal Profession in India. viii. Legal Education in India , USA and UK
BLOCK TEST 1			
OCTOBER-NOVEMBER	8	Legal Services	i. Brief History of Legal Services ii. Free Legal Aid under Criminal law iii. Legal Aid by the State iv. Legal Aid under the Indian Constitution v. NALSA Regulations, 2010 vi. Legal Services Authority Act 1987 vii. Legal Aid in te context of Social Justice and Human Rights
NOVEMBER DECEMBER	PRE-BOARDS		

Pre-Board Syllabus As Per CBSE Specification



PAINTING Session: 2023-24

MONTH	UNIT	TOPIC	SUB TOPIC	
APRIL	1	Rajput School	Ragasthani School Of Painting: Intro, Main features	
			Maru Ragini- Mewar School	
			Chaugan Players- Jodhpur School	
			Krishna On Swing- Bikaner School	
			Radha (Bani Thani)- Kishangarh	
MAY	1	Pahari & Mughal School	Bharat Meet Rama At Chitrakoot- Jaipur	
			Pahari School Of Painting- Intro, Main features	
			Krishna With Gopies- Basohli School	
			Mughal School- Intro, Main Features	
JUNE	2	Mughal School	Krishna Lifting Mount Govardhana- Miskin	
			Falcon On A Bird Rest- Ustad Mansoor	
			kabir & Raidas- Faquirullah Khan	
			Marriage Procession Of Dara Shukoh- Haji Madni	
JULY	2	Deccan School	The Deccan School- Intro	
			Hazrat Nizamuddin Auliya & Amir Khuhusro	
			Chand Bibi Playing Polo	
			National Flag Of India & Symbolic Significance	
UNIT TEST-1				
AUGUST	3	Bengal School	Revision	
			Journey's End- Abanindranatha Thakur	
			Shiva & Sati- Nandalal Bose	
			Radhika- Chughtai	
UNIT TEST-2				
AUGUST	3	Bengal School	Meghdoot- Ram Gopal Vijaivargiya	
			Contribution Of Indian Artist, Freedom movement	
			BLOCK TEST-1	



**PAINTING** Session: 2023-24*contd.*

MONTH	UNIT	TOPIC	SUB TOPIC
SEPTEMBER	3	Painting	Rama Vanquishing The Pride Of Ocean- Ravi Verma
			Mother & Child- Jamini Roy
			Haldi Grinders- Amrita Sher Gill
			Mother Teresa- Hussain
OCTOBER	3	Graphics	Children- Somnath Hore
			Devi- Jyoti Bhatt
NOVEMBER	3	Graphics & Sculpture	Of Walls- Anupam Sud
			Man, Woman & Tree- Laxma Goud
			Triumph Of Labour- D.P Roy Chowdhury
DECEMBER	3	Sculpture	Santhal Family- Ramkinkar Vajj
			Cries Un- Heard- Amar Nath Sehgal
			Ganesh- P.V. Janaki Ram
DECEMBER & JANUARY	RIVISION & PREBOARD		

Pre-Board Syllabus As Per CBSE Specification





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