



Indian School Wadi Kabir

Class: XII

ISWK SHARING KNOWLEDGE

(Monthly Plan - August 2025)

SUBJECTS	Week - 1	Week - 2	Week - 3	Week - 4		Week - 5	Learning Outcomes
ENGLISH	RATTRAP	RATTRAP- CNTD FORMAL INVITATION	THE ENEMY	A THING OF BEAUTY ARTICLE WRITING		A THING OF BEAUTY ARTICLE WRITING CTD	STUDENTS ARE ABLE TO WRITE SHORT ANSWER QUESTIONS. LAQs, RTC, COMPETENCY BASED Qs EXTRAPOLATORY Qs AND VARIOUS WRITING TASKS USING APPROPRIATE LAYOUT AND LANGUAGE
MATHEMATICS	Application of derivatives: Rate of change, increasing/decreasing functions	Application of derivatives: Maxima , minima, application, case study based	Integrals: Meaning, formulae and types of integration:	Integrals: By parts, definite integrals		Integrals: Definite integrals	Understanding the concept of integral, Identifies integration techniques, Apply appropriate methods of

			Substitution, partial fraction				integration, Applies fundamental theorem of calculus , definite integrals.
PHYSICS	Exercises and worksheet. CHAPTER-5- Magnetism and matter.Bar magnet, bar magnet as an equivalent solenoid(qualitativ e 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	Chapter-6- Electromagnetic induction; Faraday's laws,.Induced emf and current; Lenz's Law. Self and mutual induction.	CHAPTER-7- ALTERNATING CURRENTS- Alternating currents, peak and rms value of alternating current/voltage; Reactance and impedance; LCR series circuit(phasor only).resonance; circuits wattless current. AC generator and transformer. CHAPTER-8- ELECTROMAGNETIC WAVES - Displacement current.	CHAPTER-9-Ray optics- Reflection of light, spherical mirrors, mirror formula. "Refraction of light, total internal reflection and its applications,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, combination of lenses. Refraction of		CHAPTER-9-Ray optics- Board questions	Pupil would be able · To explain about magnetism and magnetic field To understand the different terms associated with magnetism. To compare different types of magnetic materials. Understand the basic principle of electromagnetic induction. Describe Faraday's laws of electromagnetic induction.

	field(qualitative treatment only); magnetic field lines. • Magnetisation and magnetic intensity Classification of magnetic materials. • Properties of Dia, Para, Ferro- magnetic substances		Electromagnetic waves-their characteristics, their transverse nature(qualitative treatment only). Electromagnetic spectrum, production properties and uses.	light through a prism.			Explain the concept of magnetic flux and its role in induction. Distinguish between self-induction and mutual induction. Understand Light Propagation • Learn how reflection and refraction govern the behavior of light rays. Master Mirror and Lens Equations • Derive and apply the mirror formula and lens formula. • Calculate image formation using focal length, object
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							distance, and image distance. Explore Real vs Virtual Images Distinguish between different types of images formed by spherical mirrors and lenses.
CHEMISTRY	Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry.	Unit X: Biomolecules. Carbohydrates - Classification (aldoses and ketoses), monosaccharides (glucose and fructose), D-L configuration oligosaccharides (sucrose, lactose, maltose).	Proteins - Elementary idea of - amino acids, peptide bond, polypeptides, proteins, structure of proteins - primary, secondary, tertiary structure and quaternary	Unit I: Solutions Solid solutions, Raoult's law, Colligative properties - relative lowering of vapour pressure, elevation of boiling point, depression of freezing point		osmotic pressure, determination of molecular masses using colligative properties, abnormal molecular mass, Van't Hoff factor.	classify carbohydrates on the basis of their structure classify amino acids as essential and nonessential understand the terms osmosis, isotonic solutions, hypertonic solutions

		polysaccharides (starch, cellulose, glycogen); Importance of carbohydrates.	structures (qualitative idea only), Denaturation of proteins, Enzymes. Hormones excluding structure, Vitamins - Classification and functions. Nucleic Acids: DNA and RNA.				and hypotonic solutions
BIOLOGY	Molecular basis of inheritance –HGP and Fingerprinting	Evolution-Origin of universe, life Evidence for evolution Adaptive evolution Mechanism of evolution & brief account of Evolution.	Human health and diseases - Diseases, Life cycle of Plasmodium, Cancer	Human health and diseases :AIDS, Drug and alcohol abuse. Microbes in human welfare – Household, industrial and agricultural roles		Microbes in human welfare – Sewage treatment, biocontrol agents, biofertilisers	Understand what DNA fingerprinting is, its importance, steps involved in it. Appreciate how DNA fingerprinting helped during AI crash to identify bodies. Explain the symptoms,

							causative organism and mode of infection of different diseases Appreciate the beneficial roles of different microbes
INFORMATICS PRACTICES	Introduction – matplotlib, Installing matplotlib. Types of visualization- Basic visualization rules, basic nomenclature of a plot.	Types of visualization- Basic visualization rules, basic nomenclature of a plot. Line plot, bar chart, line chart and histogram	MySQL Revision on DML commands select statement, where, - between, like, in , is null etc..	Aggregate Functions in SQL – Sorting – Order By.		DDL commands with group by , having , aggregate functions	revision of Class XI topics DDL statements with group by , having Aggregate functions
COMPUTER SCIENCE	csv file - import csv module, write data to csv file using csv.writer() and read data from csv files using csv.reader().	Data Structure: Stack, operations on stack (push & pop), Implementation of stack using list.	Database concepts: introduction to database concepts and its need. Relational data model:	Structured Query Language: introduction, Data Definition Language and Data Manipulation Language, data		Create database, use database, show databases, drop database, show tables, create table, describe table,	- Students are able to understand the working of csv files and how to write/read data to/ from csv file. - Learning the concept of stack

			relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key)	type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key),		DDL & DML Commands - insert , delete , select, operators (mathematical, relational and logical)	and its various operations. ● Students are able to understand the Data definition and Data manipulation language, various data types used and creation of database and tables in MySql
ACCOUNTANCY	Public subscription of shares - over subscription and under subscription of shares; issue at par and at premium, calls in advance and arrears.	Issue of shares for consideration other than cash. Accounting treatment of forfeiture and reissue of shares.	Accounting treatment of forfeiture and reissue of shares. Comprehensive problems: Issue, calls in arrear, advance, forfeiture and reissue.	Comprehensive problems: Issue, calls in arrear, advance, forfeiture and reissue. Disclosure of share capital in the Balance Sheet of a company.		ACCOUNTING FOR ISSUE OF DEBENTURES: Issue of debentures at par, at a premium and at a discount. Issue of debentures for consideration other than cash. Issue of debentures with terms of redemption	Students will be able to : -Explain the accounting treatment of share capital transactions regarding issue of shares. develop the understanding of accounting treatment of forfeiture. -Understand the accounting treatment of forfeiture and re-

							issue of forfeited shares. -Pass entries, prepare cash book, A/c s and presentation of share capital in balance sheet. -Explain the accounting treatment of different categories of transactions related to the issue of debentures.
BUSINESS STUDIES	Chp 8 Staffing: Concept and importance of staffing Staffing as a part of Human Resource Management concept Staffing process Recruitment process Selection process	Staffing Notes Chp 9 Directing: Directing: Concept and importance	Elements of Directing. Motivation - concept, Maslow's hierarchy of needs, Financial and non-financial incentives	Leadership - concept, styles - authoritative, democratic and laissez faire Communication - concept, formal and informal communication		barriers to effective communication, how to overcome the barriers? writing notes	students will understand the meaning, importance, and elements of directing in management. They will learn about key components like supervision, motivation, leadership, and communication,

	Training and Development - Concept and importance, Methods of training - on the job and off the job - vestibule training, apprenticeship training and internship training						and how these influence employee performance. The chapter also helps students analyze the role of effective directing in achieving organizational goals.
ECONOMICS	Human Capital Formation: Meaning , Role of HCF in Eco dev Problems of HCF. Measures taken by the govt to promote the development of HCF	Determination of Income and Employment: AD and its Components Propensity to consume and propensity to save (average and marginal). Short-run equilibrium output; investment	Multiplier and its mechanism: Meaning of full employment and involuntary unemployment Rural Development : Key issues- Credit n Marketing. Role of Cooperatives	Agricultural Diversification, Alternative farming, Organic farming - Merits n Demerits		Government budget and the economy: Meaning, objectives and components Changes in Govt spending, taxes	Understands the role of HCF in the devel of the country Learns how the govt measures are taken to promote HCF Understands AD working of investment multiplier Understands the importance of organic farming Learns about the strategies of the govt

							How the budget is passed in parliament
ENTREPRENEURSHIP	ENTERPRISE MARKETING: Promotion Strategies: Sales Strategy	- Promotion Techniques - Types of Media - Promotional Tools Chapter 4: ENTERPRISE GROWTH STRATEGIES Growth and development concept	Franchising: Concept and types. - Franchising: Advantages and limitations to franchisor and franchisee.	Mergers and Acquisition: Concept		Reasons and types of Mergers & Acquisition. Concept of Business synergy Reasons for mergers and acquisitions	Appreciate growth of business firms through M & A Understand the concept of growth & development of an enterprise. Discuss the concept, types, advantages and limitations of franchising. Appreciate growth of business through mergers and acquisitions. Discuss the different types of mergers and acquisitions. Discuss the reasons for mergers and acquisitions.

MARKETING	Chp3 PLACE AND DISTRIBUTION 1. Explain meaning and importance of place 2. Comprehend the functions performed by channels of distribution 3. Classify the types of distribution channels	4. Understand the marketing intermediaries involved in distribution channels 1. Elucidate the functions performed by the intermediaries (A) Wholesaler - Functions (B) Retailer - Functions	Differentiate between the wholesaler and retailer 3. Identify and comprehend the Factors Affecting the Selection of the Channel of Distribution - Factors pertaining to the product	- Factors Pertaining to the Consumer or Market - Factors Pertaining to the Middlemen - Factors Pertaining to the Producer or Company - Other Factors		Writing Notes	By the end of the lesson, students will be able to: Explain the meaning and role of 'place' in marketing. Identify types of distribution channels and their functions. Describe the roles of wholesalers and retailers. Differentiate between wholesalers and retailers. Identify factors affecting the choice of distribution channels.
ENGINEERING GRAPHICS	Machine drawing - Free hand sketches : Types of studs	Types of Rivet heads and Machine screws	Unit 3 : Bearings - Introduction to the new chapter ,concept of Assembling of	Bushed bearing : Disassembly		Open bearing : Assembly	Knowledge of drawing the disassembled view from the assembled view.

			bushed bearing.				
PSYCHOLOGY	hp 3.Meeting Life Challenges Introduction Nature, Types and Sources of Stress Effects of Stress on Psychological Functioning and Health •Stress and Health •General Adaptation Syndrome •Stress and Immune System •Lifestyle & Stree :	Coping with Stress • Stress Management Techniques 5. Promoting Positive Health and Well-being •Life Skills • factors affecting Positive Health	Introduction to Chp 4- Psychological Disorders *Anxiety Disorders *Obsessive-Compulsive and Related Disorders *Trauma-and Stressor-Related Disorders	Chp 4- Cont... *Somatic Symptom and Related Disorders *Dissociative Disorders *Depressive Disorder	*Bipolar and Related Disorders *Schizophrenia Spectrum and Other Psychotic Disorders *Neurodevelopmental Disorders *Disruptive, Impulse-Control and Conduct Disorders	*Feeding and Eating Disorders *Substance Related and Addictive Disorders	*Learners will be able to understand different model explaining about Stress. *They can appreciate various methods to overcome stress ----- -- Learners will be able to- * Differentiate between different disorders *Relate to real life examples and cases
PHYSICAL EDUCATION	UNIT 5 Sports & Nutrition Concept of balanced 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	Understand the concept of a balanced diet and nutrition. Classify Nutritive and Non- Nutritive components of the Diet

							Identify the ways to maintain a healthy weight Know about foods commonly causing food intolerance Recognize the pitfalls of dieting and food myths
SOCIOLOGY	Chapter 4: Challenges to Cultural Diversity Secularism Role of Civil Society	Chapter 5: Structural change 1. Introduction 2. Industrialization, deindustrialisation 3. Urbanization 4. Tea estates in British India	Chapter 6: Cultural change 1. Introduction 2. Westernization 3. Sanskritization 4. Modernization 5. Secularization	Chapter 7: Change & Development in Rural Society 1. Relation b/w agriculture & culture 2. Social stratification in agrarian society	Chapter 7: Change & Development in Rural Society 3. Land reforms 4. Green Revolution & its social impact	Chapter 7: Change & Development in Rural Society 5. Globalization and impact on Agriculture 6. Farmers suicides	#Students will be able to appreciate the cultural diversities in India, problems, challenges and opportunities #Students will delve deeper into India regionalism, issue of communalism # Understand the role of Civil society to abet authoritarian statehood Chap5*They can appreciate the causes and factors that lead to structural change in

							India- industrialization, urbanization in colonial and post colonial times Chap 6# Students will learn about the cultural change brought about social reformers and 4 process of Westernization, Sansritization, Modernization & secularization in India CHAP 7: Learners will be able to:- *Understand the relation b/w culture & agriculture, analyze the agrarian structure in relation to class-caste coherence * Describe and differentiate the condition of Indian agriculture under the British, impact
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							of various land revenue systems *Describe the land reforms after independence * Discuss the sociological implications of the Green Revolution, globalization-liberalization and its impact on Indian agriculture-incidence of farmer's suicides etc
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(Monthly Plan - September 2025)

SUBJECTS	Week - 1	Week - 2	Week - 3	Week - 4	Week - 5	Learning Outcomes
ENGLISH	INDIGO Letter to editor	REPORT WRITING- SCHOOL MAGAZINE	JOURNEY TO THE END OF THE EARTH	Assessment 1 Revision	Assessment 1 Revision	STUDENTS ARE ABLE TO WRITE SHORT ANSWER QUESTIONS. LAQs, RTC, COMPETENCY BASED Qs EXTRAPOLATORY Qs AND VARIOUS WRITING TASKS USING APPROPRIATE LAYOUT AND LANGUAGE
MATHEMATICS	Definite Integrals definite Integral, Definite integral using substitution and properties	Application of Integrals: Introduction to application of integrals. Area under simple curves	Application of Integrals: Application of integrals in real life	Assessment 1 Revision	Assessment 1 Revision	Understands definite Integral, Definite integral using substitution and properties. Understands Introduction to application of integrals.

						Finding area under simple curves
PHYSICS	Refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula. Magnification, power of a lens, combination of thin lenses in	Instruments. Microscopes (astronomical telescopes (g & refracting) and their magnifying powers	ASSESSMENT-1 AND REVISION	ASSESSMENT-1 AND REVISION	10- WAVE OPTICS-Wave front, wave characteristics, Huygen's principle	Comprehend Refraction through Prisms and Lenses - Analyze how light bends through prisms and lenses. - Study phenomena like dispersion and total internal reflection. Grasp Optical Instruments - Understand the working

	contact, combination of lenses. Refraction of light through a prism.					principles of instruments like the microscope, telescope, and camera. ● Learn how magnification is achieved and calculated.
CHEMISTRY	Unit II: Electrochemistry: Redox reactions, 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 law of electrolysis (elementary idea), dry cell-electrolytic cells and Galvanic cells, lead accumulator, fuel cells, corrosion.	ASSESSMENT 1	ASSESSMENT 1	ASSESSMENT 1	distinguish between Electrolytic cells and Galvanic cells define terms such as Conductance, Conductivity and Molar Conductivity list chemical examples of Electrolysis and the products of electrolysis

BIOLOGY	Biotechnology – principles and processes - Introduction, tools	Biotechnology – principles - Process - steps. Revision for Assessment 1	ASSESSMENT 1	ASSESSMENT 1	ASSESSMENT 1	Students are able to explain the different tools and steps involved in recombinant DNA technology. Analyse the different tools required and its significance in Biotechnology.
INFORMATICS PRACTICES	Group By – Having Clause – Aggregate Functions and Condition on Groups Revision for Assessment 1	Revision for Assessment 1 Examination : Pandas Series and DataFrame	ASSESSMENT 1	ASSESSMENT 1	ASSESSMENT 1	The concept of the following will be applied: 1. sum() , min(), max() , count() 2. Sorting the records using order by clause Recall all commands of Series and DataFrame
COMPUTER SCIENCE	DML & DDL Commands - Alter table, drop table, aliasing, distinct clause, where	Revision for Assessment 1 Examination :	ASSESSMENT -1	ASSESSMENT -1	ASSESSMENT -1	Students will be able to understand the various DDL & DML commands, its usage.

	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),					The concept of the following will be applied: 1. sum() , min(), max() , count()
ACCOUNTANCY	Issue of debentures as collateral security. Interest on debentures Writing off discount / loss on issue of debentures	Interest on debentures, Writing off discount / loss on issue of debentures	ASSESSMENT -1	ASSESSMENT- 1	ASSESSMENT-1	Students will be able to: - understand the concept of collateral security and its presentation in balance sheet. Develop the skill of calculating interest on debentures and its accounting treatment. Develop the understanding

						and skill of writing off discount / loss on issue of debentures. - Understand the circumstances under which losses on the issue occur and the method of writing off the loss and Pass the entries.
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BUSINESS STUDIES	Controlling - Concept and importance Relationship between planning and controlling Steps in process of control	Financial Management: Concept, role and objectives Financial decisions: investment, financing and dividend - Meaning and factors affecting Financial Planning - concept and importance	ASSESSMENT- 1 STARTS	ASSESSMENT- 1 STARTS	ASSESSMENT- 1 STARTS	students will understand the meaning, objectives, and importance of managing finances in a business. They will learn about key decisions related to investment, financing, and dividend, along with factors affecting these decisions. The chapter also enables students to analyze the impact of sound financial management on the overall success of an organization.
ECONOMICS	Classification of receipts-Revenue receipts and Capital receipts	Classification of expenditure – Revenue expenditure and Capital Expenditure Measures of Government Deficit: Revenue, Fiscal and Primary deficit : Meaning	ASSESSMENT- 1 STARTS	ASSESSMENT- 1 STARTS	ASSESSMENT- 1 STARTS	Students will be able to understand the classification and Measures taken by the govt Identifying Similarities and Differences. ...

REPRENEURSHIP	Chapter 5: BUSINESS ARITHMETIC- Unit of Sale, Unit Cost for multiple products or services	Calculation of Gross profit and percentage of Gross profit.	Assessment 1	Assessment 1	Assessment 1	Understanding the concept of Unit Cost and Unit Price. Able to calculate cost, sales and gross profit for multiple product.
MARKETING	SELF MANAGEMENT SKILLS - IV 1. Describe the various factors influencing self motivation 2. Describe the basic personality traits, types and disorders 3. Stress management strategies 4. Self awareness 5. Result orientation - Goal setting	COMMUNICATION SKILLS 1. Importance of active listening at workplace 2. Steps to active listening 3. Interview Skills 4. Demonstration of writing skills 5. Grammar WRITING NOTES	ASSESSMENT- 1 STARTS	ASSESSMENT- 1 STARTS	ASSESSMENT- 1 STARTS	students learn the importance of managing themselves effectively to achieve personal and career goals. They develop self-awareness, self- discipline, and self- control to improve focus and productivity. The unit also helps them apply time management strategies and maintain a healthy routine. Students are taught ways to handle stress and emotions positively, promoting mental well-being. Additionally, they build

						confidence, adopt a positive attitude, and learn to set SMART goals for personal and professional growth
ENGINEERING GRAPHICS	Open bearing : Disassembly	Unit 4 : Rod joints- Introduction and types of rod joints and definitions, Assembly and disassembly of sleeve and cotter joint & Revision for Assessment 1	ASSESSMENT 1 STARTS	ASSESSMENT 1 STARTS	ASSESSMENT 1 STARTS	Knowledge of new chapter rod joints with its detailed definitions.
PSYCHOLOGY	Chp. 5- Introduction to the Chapter Therapeutic Approaches 1. Nature and Process of psychotherapy *Therapeutic relationship	•Humanistic-Existential Therapy •Alternative Therapies •Factors contributing to healing in Psychotherapy Ethics in Psychotherapy 3. Rehabilitation of the Mentally Ill	ASSESSMENT 1	ASSESSMENT 1	ASSESSMENT 1	Learners will be able to- * elaborate on components of different theoretical approaches. *Appreciate the value of therapy in well-being of individuals.
PHYSICAL EDUCATION	UNIT 6 Test & Measurement in Sports	Measurement of Cardio-Vascular Fitness – Harvard Step Test – Computing Basal Metabolic Rate (BMR)	ASSESSMENT 1	ASSESSMENT 1	ASSESSMENT 1	Perform SAI Khelo India Fitness Test in school [Age group 5-8 years/ (class 1

	Fitness Test – SAI Khelo India Fitness Test in school, Age group 5-8 years/ class 1-3: BMI, Flamingo Balance Test, Plate Tapping Test Age group 9-18yrs/ class 4-12: BMI, 50mt Speed test, 600mt Run/Walk, Sit & Reach flexibility test, Strength Test (Partial Abdominal Curl Up, Push-Ups for boys, Modified Push-Ups for girls).	Rikli & Jones - Senior Citizen Fitness Test, Johnsen – Methney Test of Motor Educability				-3) and Age group 9-18yrs/ (class 4-12) Determine physical fitness Index through Harvard Step Test/Rock- port Test Compute Basal Metabolic Rate (BMR) Describe the procedure of Rikli and Jones - Senior Citizen Fitness Test
SOCIOLOGY	Chapter 7: Change & Development in Rural Society	Revision for Asst 1 begins	Revision continues	Asst 1 Exams	Exams	Completion of syllabus for Asst 1 and thorough revision of all topics before exams Reviewing project drafts and final project feedback



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ISWK SHARING KNOWLEDGE

(Monthly Plan - October 2025)

SUBJECTS	Week - 1	Week - 2	Week - 3	Week - 4	Week - 5	Learning Outcomes
ENGLISH	POETS AND PANCAKES	INVITATION & REPLIES THE INTERVIEW	REPORT WRITING - newspaper ON THE FACE OF IT	A ROADSIDE STAND Notice writing	GOING PLACES	STUDENTS ARE ABLE TO WRITE SHORT ANSWER QUESTIONS. LAQs, RTC, COMPETENCY BASED Qs EXTRAPOLATORY Qs AND VARIOUS WRITING TASKS USING APPROPRIATE LAYOUT AND LANGUAGE
MATHEMATICS	Differential Equations: Introduction, Degree and order,	Differential Equations: Differential equations 1st order and first degree using variable separable method, homogeneous equations,	Vector Algebra: Introduction, Types of vectors, Addition of vectors, Multiplication of vectors by scalar, Dot and cross	Vector Algebra: Scalar triple product of 3 vectors, projection of one vector on another.	Three Dimensional Geometry: The concept related to 3D. Direction cosine idea Direction cosine of a line passing through two points.	Understands Introduction, Degree and order, General and particular solution. Solves using variable separable method, homogeneous equations,

	General and particular solution.	Linear Differential Equation method	product, Scalar triple product. Idea of vector product	To analyze vectors if dot product or cross product is zero	Equation of a line in a space	Types of vectors, Addition of vectors, Multiplication of vectors by scalar, Dot and cross product, Scalar triple product.
PHYSICS	CHAPTER-10- WAVE OPTICS- Reflection and refraction of a plane wave and its proof. Interference, Young's double slit experiment and expression for fringe width (no derivation final expression only), coherent sources and sustained interference of light.	CH-10- WAVE OPTICS- Diffraction due to a single slit, width of central maximum (qualitative treatment only). CHAPTER-11- 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. Matter waves - wave nature of particles, de Broglie relation. Exercises and numerical	CHAPTER-12- Atom - Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model, energy levels, hydrogen spectrum.	CHAPTER-13- NUCLEI- Composition and size of nucleus, atomic masses, isotopes, isobars; isotones. Mass defect. Binding energy per nucleon. Nuclear reactions. Nuclear fission and nuclear fusion.	Exercise questions and numerical.	Students are able to Describe the composition of the nucleus (protons and neutrons). Define nuclear radius and binding energy. Students are able to Describe the basic structure of the atom: electrons, protons, and neutrons. Understand the concept of atomic number, mass number, and isotopes. Explain the Rutherford and Bohr models of the atom. Describe the composition of the

						nucleus (protons and neutrons). Define nuclear radius and binding energy. Understand and calculate mass defect and binding energy using Einstein's equation $E=mc^2$
CHEMISTRY	Unit III: Chemical Kinetics Rate of a reaction (Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst, Order and molecularity of a reaction, rate law and specific rate constant. integrated rate equations and half-life (only for	Concept of collision theory (elementary idea, no mathematical treatment), activation energy, Arrhenius equation.	Unit V: d and f Block Elements General introduction, electronic configuration, 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	Unit IX: Coordination Compounds Coordination compounds - Introduction, ligands, Coordination number, colour, magnetic properties and shapes, Werner's theory	appreciate the importance and need of Chemical Kinetics in Chemistry define and express Rate of a reaction in terms of different Reactants and Products appreciate the effect of catalyst on Activation Energy

	zero and first order reactions).			compounds, alloy formation Lanthanoids and Actinoids – Electronic configuration, oxidation states, chemical reactivity and lanthanoid contraction and its consequences. - comparison with lanthanoids.		identify oxidation states of 3d series members differentiate between coordination compounds and double salts / organometallic compounds
BIOLOGY	Biotechnology – application : Application in agriculture, medicine and transgenic organisms	Organisms and Populations – population growth, population interactions	Ecosystem – Components, energy flow, pyramids	Biodiversity and conservation – Levels, patterns, importance	Biodiversity and conservation – loss of biodiversity & conservation	Describe the different applications of biotechnology in agriculture, medicine etc. Appreciate the roles of transgenic organisms especially in the field of medicine.

						Describe the population interactions and growth models Explain the reasons for loss of biodiversity and the methods of conservation of Biodiversity
INFORMATICS PRACTICES	Single row functions- numeric, string and date functions Working with two tables using equi-join	Introduction to Computer Networks Introduction to networks, Types of network: LAN, MAN, WAN. Network Devices: modem, hub, switch, repeater, router, gateway	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. Web Browsers:	Introduction, commonly used browsers, browser settings, add-ons and plug-ins, cookies	Students will learn the concept of groupby clause. To apply group by clause in the SQL queries. To use having clause . They will be able to differentiate between where and having clauses Students will understand the advantages and use of networking.

						• Different types of networks • Different network devices
COMPUTER SCIENCE	Joins: cartesian product on two tables, equi-join and natural join	Interface of python with an SQL database: connecting SQL with Python, performing insert, update, delete queries using cursor	Display data by using fetchone(), fetchall(), rowcount, creating database connectivity applications	Evolution of networking: introduction to computer networks, evolution of networking (ARPANET, NSFNET, INTERNET)	Data communication terminologies: concept of communication, components of data communication, measuring capacity of communication media, IP address, switching techniques (Circuit switching, Packet switching)	Students will be able to understand the difference between equi join and natural join. They will be able to implement sql python connectivity.
ACCOUNTANCY	FINANCIAL STATEMENT ANALYSIS: Financial statements of a Company: Financial statements of a Company, Statement of Profit and Loss	Tools for Financial Statement Analysis: Comparative statements, common size statements, Ratio analysis.	Ratio Analysis.	Ratio analysis Cash Flow Statement.	Cash Flow Statement	Students will be able to: - Develop the understanding of major headings and sub-headings of balance sheet as per the

	and Balance Sheet in prescribed form.					prescribed norms / formats. - Learn the meaning, objectives and limitations of financial statement analysis.meanin g of different tools of 'financial statements analysis' - Develop the skill of preparation of comparative and common size statements. - Understand the uses and differences between the two. - Understand the meaning, objectives and significance of different types
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						of ratios. Develop the understanding of computation of Solvency, liquidity, activity and profitability ratios. - Learn the meaning and objectives of the cash flow statement. - Develop understanding of preparation of Cash Flow Statement with adjustments.
BUSINESS STUDIES	Capital Structure – concept and factors affecting capital structure Fixed capital	Factors affecting Working Capital - Concept and factors affecting their requirements	Financial Markets: Concept Money Market: Concept Capital market and its types primary and secondary)	Stock Exchange - Functions and trading procedure Securities and Exchange Board of India (SEBI) - objectives and functions Consumer	The Consumer Protection Act, Meaning of consumer Rights and responsibilities of consumers Who can file a complaint? Redressal machinery Remedies available	students will understand the importance of safeguarding consumer rights and the need for consumer awareness in a competitive market. They will learn about the rights and responsibilities of

				Protection: Concept and importance		consumers and the legal remedies available under the Consumer Protection Act. The chapter also helps students analyze the role of consumer organizations and the government in ensuring consumer welfare.
ECONOMICS	Employment, Growth and Informalisation: Growth and changes in work force participation	Formal and Informal- Problems and Policies.	Open Economy: Balance of Payments Account: Meaning and Components Current a/c and Capital a/c	Balance of Payments Account: (Conti...) Balance of Trade, BOP: Surplus and Deficit - Meaning, Types Autonomous and Accommodating items - Meaning	Balance of Payments Account: (Conti...) Exchange rates: Fixed and Flexible- Merits and Demerits Managed floating rate	Understands the differences b/w Formal and Informal Students will be able to differentiate b/w cur a/c and cap a/c Students will be able to differentiate b/w BOP and BOT Learns about the Concept and the differences
ENTREPRENEURSHIP	Chapter 5: BUSINESS ARITHMETIC - Break even Analysis for multiple products or services	Computation of Working Capital. Inventory Control system and calculation of EOQ for stock management.	Return on Investment (ROI) and Return on Equity (ROE). Preparation of Financial Statement.	Unit 6: RESOURCE MOBILISATION - Capital Market: Meaning & Concept.	Angel Investor: Meaning and Features. Role of angel investor for start-ups.	Calculate Break-even point for Multiple products and services. Understand the concept of Inventory Control Compute the working capital of a

				Primary market: Concept, methods of issue of securities		business. Calculate Return on Investment; Return on Equity and Economic Order Quantity. Understand the need of finance in Business. Discuss the various sources of funds required for a firm. Understand the ways of raising funds in primary market. Appreciate the role of Angel Investors
MARKETING	Chp 4 PROMOTION 1. Explain the meaning and importance of Promotion 2. Comprehend the elements of promotion mix (A) Advertising - Meaning	(B) Sales Promotion - Objectives - Types 3. Differentiate between Advertising and Sales Promotion (C) Personal Selling 4. Difference between Personal selling and Sales Promotion (D) Word of Mouth (E) Direct Marketing (F) Online Marketing	G) Public Relations (H) Sponsorships 5. Factors affecting Selection of Promotion Mix writing notes	ENTREPRENEURIAL SKILLS 1. Understand the meaning and characteristics of entrepreneurship 2. Identify the qualities of an entrepreneur 3. Differentiate between the types of entrepreneur	Chp 5 EMERGING TRENDS 1. Explain the meaning and characteristics of service 2. Analyze the service sector in India 3. Understand the types of services 4. Analyze the criteria to judge the quality of service 5. Understand the concept of Online marketing	students will understand the meaning and key characteristics of services and explore various types of services in India's growing service sector. They will learn how to assess service quality using specific criteria and gain insights into the concept of online marketing. Students will also analyze the

	- Modes of Advertising I. Print Media a. Newspaper - Merits - Demerits Modes of Advertising b. Magazines - Merits - Demerits c. Yellow page - Merits - Demerits Radio TV Cinema Outdoor Others			"4. Understand the Roles and functions of an entrepreneur 5. Analyze the motivating factor for an entrepreneur 6. Highlight the concept of Startups 7. Comprehend the Barriers to Entrepreneurship 8. Inculcate Entrepreneurial Attitudes 9. Understand the Entrepreneurial Competencies	6. Analyze the advantages and disadvantages of online marketing	advantages and disadvantages of online marketing in today's business environment.
ENGINEERING GRAPHICS	Gib and cotter joint : Assembly and disassembly	Unit V : Tie Rod and Pipe joints - Introduction and definitions of pipe	Turnbuckle - Disassembly	Flanged pipe joint - Assembly	Flanged pipe joint - Definitions	Understands the concept of pipe joint and assembling of flanged pipe joint from

		joints - Assembly of turnbuckle				the disassembled views.
PSYCHOLOGY	Chp 6: Social Cognition Introduction Explaining Social Behaviour Social Cognition	Attitude Formation and Change Attitude Formation Attitude Change Attitude-Behaviour Relationship	Nature and Components of Attitudes Prejudice and Discrimination Strategies for Handling Prejudice	Schemas and Stereotypes Impression Formation and Explaining Behaviour of Others through Attributions Impression Formation Attribution of Causality	Behaviour in the Presence of Others Pro-social Behaviour Factors Affecting Pro-social Behaviour	Learners will be able to:- *Enlist the components of Attitudes *Describe the difference between prejudice and discrimination * Discuss the experiments based on Social cognition and Behaviour in group
PHYSICAL EDUCATION	UNIT 7 Physiology & Injuries in Sport Physiological factors determining	Physiological changes due to aging, Sports injuries: Classification (Soft Tissue Injuries - Abrasion, Contusion,	UNIT 8 Biomechanics and Sports Newton's Law of Motion & its application in sports	Equilibrium – Dynamic & Static and Centre of Gravity and its application in sports	Friction & Sports Projectile in Sports	UNIT 7 Recognize the physiological factors determining the components of physical fitness. Comprehend the effects of exercise on

	components of physical fitness Effect of exercise on the Muscular System, Effect of exercise on the Cardio-Respiratory System	Laceration, Incision, Sprain & Strain Bone & Joint Injuries - Dislocation, Fractures - Green Stick, Comminuted, Transverse Oblique & Impacted)	Types of Levers and their application in Sports.			the Muscular system and cardiorespiratory systems. Figure out the physiological changes due to ageing. Classify sports injuries with its Management. UNIT 8 Understand Newton's Law of Motion and its application in sports Recognize the concept of Equilibrium and its application in sports. Know about the Centre of Gravity and will be able to apply it in sports Define Friction and application in sports. Understand the concept of Projectile in sports.
SOCIOLOGY	Chapter 8: Change & Development in Industrial society -background	Chapter 8: Change & Development in Industrial society - how people find work	Chapter 9: Social Movements Introduction 1.Theories 2. Classification	Chapter 9: Sociology 3. Types: Ecological, caste based, workers,	Chapter 9: Social Movements - Workers & Women's movement	Chap 8: Students will: * Enhance their understanding of the different sectors of India's economy *

	-different sectors -industrialization in independent India	- Scientific Management /Taylorism - Contractor system - Liberalization policy and its impact - Home-based work - Time slavery in IT sector - Mining Industry - Trade Unions and strikes				Industrialization after independence *Analyse how people find work * Scientific Management *Contractor system * Liberalization policy and its impact *Home-based work *Time slavery in IT sector *Mining Industry *Trade Unions and strikes Chap 9: Students learn about the theories of social movements, types and the impact on society
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Indian School Wadi Kabir

Class: XII

ISWK SHARING KNOWLEDGE
(Monthly Plan - November 2025)

SUBJECTS	Week - 1	Week - 2	Week - 3	Week - 4	Week - 5	Learning Outcomes
ENGLISH	MEMORIES OF CHILDHOOD	JOB APPLICATION- Covering letter and C.V	AUNT JENNIFER'S TIGERS	INVITATIONS AND REPLIES		STUDENTS ARE ABLE TO WRITE SHORT ANSWER QUESTIONS. LAQs, RTC, COMPETENCY BASED Qs EXTRAPOLATORY Qs AND VARIOUS WRITING TASKS USING APPROPRIATE LAYOUT AND LANGUAGE
MATHEMATICS	Three Dimensional Geometry: Equation of a line passing through a point and parallel to a vector To understand shortest distance between 2 lines , Equation of plane, Coplanarity of 2 lines	Linear Programming Problems: The problem and mathematical formulation, Applications in daily life. Solutions to problems	Probability: Conditional probability, Multiplication theorem , Addition theorem, Independent events , Bayes' theorem, Random variables	Probability: Solve problem by Bayes' theorem, probability distribution of different random variables,	Revision - Prelim 1	Understands Equation of a line passing through a point and parallel to a vector Understands shortest distance between 2 lines, Equation of plane, Coplanarity of 2 lines Understands conditional probability, multiplication

			and its probability distribution.			theorem. Solve problem by Bayes' theorem, probability distribution of different random variables,
PHYSICS	CHAPTER-14- SEMICONDUCTOR ELECTRONICS- Electronic devices Energy bands in solids (Qualitative ideas only) conductor, insulator and semiconductor; semiconductor diode	CHAPTER-14- SEMICONDUCTOR ELECTRONICS- Intrinsic and extrinsic semiconductors. N and P type semiconductors.s emiconductor diode – I-V characteristics in forward and reverse bias, diode as a rectifier; IVcharacteristics.E xercise questions and numerical.	REVISION-PRELIM-1	REVISION- PRELIM 1	REVISION-PRELIM-1	Students are able to Define and explain what a semiconductor is and differentiate between intrinsic and extrinsic semiconductors. Describe the construction and working principle of a p-n junction diode. Explain the behavior of a diode under forward bias and reverse bias conditions.

						Draw and interpret the V-I characteristics of a p-n junction diode. Explain the applications of diodes in electronic circuits (e.g., rectification.
CHEMISTRY	IUPAC nomenclature of mononuclear coordination compounds. Bonding, VBT, and CFT Structure and stereoisomerism, the importance of coordination compounds (in qualitative analysis, extraction of metals and biological system).	Revision - Prelim 1	Revision - Prelim 1	Revision - Prelim 1	Prelim 1	understand IUPAC rules for naming mononuclear coordination compounds, define different types of isomerism in coordination compounds appreciate the importance and applications of coordination compounds in our day to day life
BIOLOGY	Reproductive Health	Revision - Prelim 1	Revision - Prelim 1	Revision - Prelim 1	Prelim 1	Appreciate the importance of a

	Birth control methods Infertility & ART Seminar conducted by a doctor & revised by the subject tr,					sexually healthy population. List the different birth control methods and their importance. Appreciate the different techniques used in Assisted Reproductive Technology.
INFORMATICS PRACTICES	licensing and copyright, free and open source software (FOSS), cybercrime and cyber laws, hacking phishing, cyber bullying, overview of Indian IT Act.	E-waste: hazards and management. Awareness about health concerns related to the usage of technology.	Revision - Prelim 1	Revision - Prelim 1	Prelim 1	Students will understand the following: ● Digital footprints ● IPR ● Plagiarism ● Phishing ● Hacking ● Cyber laws They will understand the importance of E waste management
COMPUTER SCIENCE	Transmission media: Wired communication media, Wireless	Types of Network, Network protocol, Introduction to Web services	Revision - Prelim 1	Revision - Prelim 1	Revision - Prelim 1	Students will be learning the Application of different network

	media, Network Devices, Network Topologies					devices and to choose the appropriate device for a given application. They will be able to distinguish the different types of networks based on the specification.
ACCOUNTANCY	Cash Flow Statement	Cash Flow Statement	Revision	Revision	Revision	Students will be able to develop the understanding of preparation of Cash Flow Statement.
BUSINESS STUDIES	Marketing – Concept, functions and philosophies Marketing Mix Product – branding, labelling and packaging – Concept Price - Concept, Factors determining price Physical Distribution –	Promotion – Concept and elements; Advertising, Personal Selling, Sales Promotion and Public Relations	Revision classes for Rehearsal 1.	Revision classes for Rehearsal 1.	Revision classes for Rehearsal 1.	students will understand the core concepts and importance of marketing in business growth. They will learn about various marketing functions, strategies, and the role of marketing in satisfying customer needs. The chapter also enables students

	concept, components and channels of distribution					to analyze how effective marketing management contributes to competitive advantage and business success. Ask ChatGPT
ECONOMICS	Sustainable Economic Development Sustainable Economic Development: Meaning, Effects of Economic Development on Resources and Environment, including global warming	Development Experience of India: A comparison with neighbours India and Pakistan India and China Issues: economic growth, population, sectoral development and other Human Development Indicators	Revision classes for Rehearsal 1.	Revision classes for Rehearsal 1.	REHEARSAL- 1 STARTS	understands the importance of environment and problems faced because of pollution taking place Understands the importance of neighbours to know once strength and weakness Understands the ranks of neighbours in various demographic indicators
ENTREPRENEURSHIP	Venture Capital: Features, funding.	REVISION	REVISION	REVISION		Appreciate the Angel Investors and Venture Capitalists as a source

	Stages in VC funding. REVISION.					of business finance. Different stages in VC funding.
MARKETING	Revision classes for Rehearsal 1.	Revision classes for Rehearsal 1.	Revision classes for Rehearsal 1.	Revision classes for Rehearsal 1.	REHEARSAL 1 STARTS	
ENGINEERING GRAPHICS	Flanged pipe joint : Disassembly	Revision classes for Rehearsal 1.	Submission of journal and collabcad project	Revision for REHEARSAL 1	REHEARSAL 1 STARTS	Understands the concept of pipe joint and disassembling of flanged pipe joint from the assembled views.
PSYCHOLOGY	Chp 7:- Social Influence and Group Processes Introduction *Nature and Formation of Groups *Type of Groups	Influence of Group on Individual Behaviour Social Loafing Group Polarisation		REVISING OF COMPLETE PORTION	REVISING OF COMPLETE PORTION	

PHYSICAL EDUCATION	UNIT 9 Psychology and 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 Psychological Attributes in Sports – Self-Esteem, Mental Imagery, Self-Talk, Goal Setting	UNIT 10 Training in Sports Concept of Talent Identification and Talent Development in Sports Introduction to Sports Training Cycle – Micro, Meso, Macro Cycle.	Types & Methods to Develop – Strength, Endurance, and Speed. Types & Methods to Develop – Flexibility and Coordinative Ability. Circuit Training - Introduction & its importance	Revision - Prelim 1	UNIT 9 Classify different types of personality and their relationship with sports performance. Recognise the concept of motivation and identify various types of motivation. Differentiate between different types of aggression in sports. Explain various psychological attributes in sports. UNIT 10 understand the concept of talent identification and methods used for talent development in sports. Understand sports training and the different cycle used in the training process. Understand different types & methods to develop -strength, endurance, and speed in sports training
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						Understand different types & methods to develop – flexibility and coordinative ability.
SOCIOLOGY	Chapter 9: Social Movements	Revision for Prelim 1	Revision continues	Revision	Prelim 1 Exams	