HANSRAJ MODEL SCHOOL PUNJABI BAGH, NEW DELHI ACADEMIC PLAN SESSION: 2025-26 SUBJECT: ENGLISH CORE CLASS: XII

MONTH	TOPICS/SUB-TOPICS	LEARNING INTENTIONS/SKILLS DEVELOPMENT	ACTIVITIES / ASSIGNMENTS
April	FLAMINGO POETRY: My Mother at Sixty Six	The students will be able to: -Comprehend familial relationship –Discuss literary devices	1 RTC and 2 SAQs Desh Bhakti Curriculum : Activity: Class discussion on 'How Is Your Motherland Comparable To Your Mother?'
	The Last Lesson	-Instil patriotism / Love for language - Enhance their vocabulary - Appreciate literature	2 SAQs and 2 LAQs Activity: Discussion - Linguistic Chauvinism
	Lost Spring	-Be sensitive towards evil practices in the society like child labour - Enhance their vocabulary	2 SAQs and 2 LAQs Activity: Discussion on Child Labour
	NOTICE WRITING: Circulatory & Non-Circulatory	-Reinforce creative writing skills - Learn formats	3 Non-circulatory and 2 Circulatory Activity: PPT to be shown
	INVITATIONS & REPLIES: Formal /Informal	-Develop creativity - Learn formats	2 Invitations and 2 Replies Activity: PPT to be shown

VISTAS	The students will be able to: -Enhance their vocabulary - Appreciate literature - Learn the nuances of irony, satire & humour - Become aware about the need to protect wildlife - Understand & analyse the text	2 SAQs and 2 LAQs 2 SAQs and 2 LAQs Activity: Debate – Destiny is All Powerful
FORMAL LETTER WRITING To the Editor / Job Application Unseen Passage 1. Factual/Descriptive/Literary 2. Case-based factual	The students will be able to: - Learn the art of formal expression / creative expression of thoughts - Assess comprehension, interpretation and inference - Develop skills of analysis, reasoning and fluency	1 letter of each type Activity: PPT to be shown Worksheets and discussions of various data based diagrams to infer

July	<u>VISTAS</u>	The students will be able to:	
	Journey to the End of the Earth	Enhance vocabularyAppreciate literature	2 SAQs and 2 LAQs
	The Enemy	 Realise that humanity transcends patriotism / humanness in war Develop critical appreciation of the theme 	2 SAQs and 2 LAQs Activity: Draw a parallel between the poem 'The Man He Killed' (by Thomas Hardy) & 'The Enemy'
	FLAMINGO		
	POETRY: Keeping Quiet	-Develop the art of introspection - Realise the importance of mutual understanding and strength - Critically analyse the title	1 RTC and 2 SAQs Activity: Students will be given 5 minutes to meditate & introspect & then reflect on their thoughts through a discussion
	POETRY: A Thing of Beauty	 Appreciate life in its small moments Identify symbolic inferences and literary devices 	1 RTC and 2 SAQs Activity: Talk / Video - Beauty in its varied forms
	Deep Water	-Inculcate the courage to face adversities -Understand idiomatic expressions	Sports Integration : Oral quiz on the popular sports in India 2 SAQs and 2 LAQs Activity: Sharing stories of people with exceptional feats
	The Rattrap	 Comprehend the message: Latent Goodness Can Be Revived Through Love And Understanding Metaphorically interpret 'The Rattrap' Develop love for literature 	2 SAQs and 2 LAQs Activity: Discussion - Riches And Temptations Can Be Resisted

	Indigo	 Instil Patriotism and spirit of freedom Learn values of truthfulness and sincerity of purpose 	2 SAQs and 2 LAQs PPT on Indigo issue
August	VISTAS On the Face of It	handicapped	<u>Art Integration</u> : Class Discussion - 'Body Shaming is a thing of the past. Acceptance of oneself is the norm of today.' 2 SAQs and 2 LAQs Activity: Discussion - Handicaps have to be accepted
	FLAMINGO Poets & Pancakes The Interview	-Enhance their vocabulary - Appreciate literature -Enhance their vocabulary - Appreciate literature	2 SAQs and 2 LAQs 2 SAQs and 2 LAQs

	POETRY: A Roadside Stand	-Identify symbolic inferences and literary devices	2 RTC and 2 SAQs
	ARTICLE / REPORT	Learn communicative skill / art of formal creative writing using proper formats - Learn objective analysis and evaluation - Understand coherence and relevance of ideas - Employ grammatical accuracy, appropriate language / spellings	1 writing skill of each type Activity: PPT to be shown
September	ALS Revision for Half Yearly examination		
October	FLAMINGO POETRY: Aunt Jennifer's Tigers	The students will be able to: -Become sensitive towards gender equality - Appreciate and comprehend symbolism	1 RTC and 2 SAQs Activity: Class Discussion - Women empowerment
	Going Places	- Become familiar with the idea of fantasizing	2 SAQs and 2 LAQs Activity: Discussion on students' dreams, hopes and aspirations

		 Differentiate between contrasting characters Learn critical analysis 	
November	<u>VISTAS</u> Memories of Childhood ALS	The students will be able to: - Condemn racial discrimination - Interpret, evaluate and respond to this critical issue	Happiness Curriculum: Discussion on the students' happy memories of their childhood. 2 SAQs and 2 LAQs Activity: Debate - Racial discrimination is no longer prevalent
December & January	Revision for Pre-board examination		

HANSRAJ MODEL SCHOOL

PUNJABI BAGH

NEW DELHI

Academic Plan 2025-2026

Subject : MATHEMATICS

CLASS :XII

MONTH	TOPIC/ SUBTOPIC	LEARNING INTENTIONS	ACTIVITY/ASSIGNMENT
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APRIL-MAY Matrices I. Meaning of matrices II. Types of matrices III. Operations on matrices IV. Properties of addition and multiplication of matrices V. Definition of Inverse of matrix Determinants I. I. Meaning and evaluation II. Minors and Cofactors III. Area of Triangle using determinants IV. Applications of matrices and determinants in solving system of linear equations Linear programming i. solving LPP of different types using graphical method	 students will be able to understand meaning of matrix, types of matrices and operations on matrices with its properties Students will be able to evaluate determinants of different orders Students will be able to understand Properties of determinants and solve system of linear equations students will be able to solve LPP 	 Sports integration :From any sport, Select a tournament or player(s).Information will be put in the form of matrix . Name the matrix and write the order of the matrix Number of elements of the matrix Taking this number of elements, how many matrices of different orders can be formed? Form any two square matrix and find the determinant. Assignment on Linear programming Art integration :Use of Geogebra to draw graphs and solve LPP
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JULY	 Relations and functions Types of Relation Equivalence Relation Types of functions(One one and Onto Functions) Inverse Trigonometric function Meaning of inverse trigonometric functions Domain and range II. Domain and range III. Principal value branch Continuity and differentiability Continuity Differentiability II. Derivatives using Chain Rule IV. Implicit functions V. Logarithmic differentiation VI. Parametric form	• Student will be able to define equivalence relation, types of	 Act 1,2-To verify that the relation is equivalence relation or not. Act 3- To demonstrate a function which is not one-one and not onto. Assignment on Relation and functions Assignment on inverse trigonometric function Act 4 - To draw the graphs of sin⁻¹x and cos⁻¹x Act 5 To find analytically the limit of a function at a point and also to check the continuity of the function at that point. Assignment on continuity and differentiability.
AUGUST	Applications of derivatives	• Students will be able	Assignment on application on
	I. Rate of change	to apply concept of	differentiability.
	II. Increasing and decreasing functions	derivatives in	Act 6 - construction of open
	V.Maxima and minima	different situations	box of maximum volume

SEPTEMBER	Integrals I. By Substitution II. Partial fractions III. By parts IV. Special integrals V. Properties of definite integrals Half-yearly Examination	 Students will understand integrals as antiderivatives and find integrals using different methods Find integrals using properties 	from a rectangular sheet. Act 7 - To verify that amongst all the rectangles of same Perimeter the square has the maximum area. Assignment on integrals.
OCTOBER	Application of Integrals I. Finding area under a curve using	students will be able to find area under curves	Assignment on Application of Integrals
	integration Differential equations I. Order and degree II. Solution by variable separable method III. Solving homogeneous and linear differential equations	 students will be able to understand differential equation- its and solution 	Assignment on Differential equations
	ProbabilityI. conditional probabilityII. Baye's theorem and its applications		

	III. probability distribution-its mean	 students will be able to understand conditional probability and apply Baye's theorem students will be able to find probability distribution-its mean 	Act 8 - To compute conditional probability of an event.
NOVEMBER	 Vectors I. definition and types of vectors II. addition,scalar and vector product of vectors Three-dimensional geometry equation of lines and plane indifferent forms distance between two skew lines 	students will understand definition and types of vectors,their addition,scalar and vector product , students will be able to find equation of lines and plane distance between two skew lines	Assignment on vectors Assignment on three dimensional geometry.

HANSRAJ MODEL SCHOOL PUNJABI BAGH,NEW DELHI ACADEMIC PLAN SESSION : 2025-2026 SUBJECT :HOME SCIENCE CLASS :12

MONT H	TOPIC/ SUBTOPICS	LEARNING INTENTIONS	ACTIVITIES	ASSIGNMENTS
APRIL	UNIT-2 NUTRITION,FOOD SCIENCE AND TECHNOLOGY Chapter-2: Clinical nutrition and Dietetics Chapter-3: Public health and nutrition	 Students will be able to understand and describe the significance of clinical nutrition and dietetics Students will be able to describe the role and function of a clinical nutritionist or medical therapist. Students will be able to explain the knowledge and skills required for a career in clinical nutrition. Students will gain understanding about nutritional problems and gain knowledge about strategies used to tackle them. 	 Students will be regularly asked to revise the Chapter and short quizzes will be taken. Class discussion will be held regularly. Recall previous concepts of food groups. 	Students will be given assignments based on topics covered including NCERT and case based questions. Project work on Mid day meal,ICDS. Preparation of practical files.

	PRACTICAL : Record one day diet of an individual (old man)	5. Students will be able to know the different types of catering and food services.Students will be able to conduct the Diet planning and modification for an old man.	 Various meals will be planned and modified to suit the needs of the old man. (Happiness curriculum) 	
MAY	UNIT-2 NUTRITION ,FOOD SCIENCE AND TECHNOLOGY Chapter-5: Food Processing and technology. Chapter-6: Food Quality and Food Safety Chapter-1 Work ,livelihood and Career	 Students will understand meaning food processing and technology Students will identify factors and skills required to be a professional food technologist. To understand the scope of employment. Understand concepts of national and international food standards. Students will identify career avenues in this area Analyse conditions under FSSAI. Causes & consequences of food contamination. 	 Case study will be discussed. Tests on food adulteration will be conducted. Listing various adulterants in food. Collecting food labels having standardised marks. 	Assignments will be given in class having Picture based questions.
	PRACTICAL: Prepare and plan	Students will be able to prepare messages related to nutrition.		

	messages for nutrition ,health and life skills using different modes of communication for different target groups. Development and preparation of supplementary foods for nutrition programs.		Posters and Charts will be prepared. (Art integration)	
JULY	UNIT-3 HUMAN DEVELOPMENT AND FAMILY STUDIES Chapter-7 Early childhood education Chapter-10 Management of support services, Institutions, Programs for Children, Youth and Elderly. Chapter-1 Work, livelihood and career.	 Analyse the problems and concepts of special education, inclusive education and support services. Students will be able to identify and study the concept of disability and different types of disability. Students will identify and explain services and programs needed for children, youth and elderly. Students will be aware of skills required in this field. 	 Role play by students to show problems. Discussion on various merits and demerits of these methods . Presentations on the needs of special children will be done. 	Newsletters will be prepared. Assignment will be provided having important MCQs.

	 PRACTICAL: 1. Listing various adulterants in food. 2. Collecting food labels having standardised marks. 3. Conducting mock sessions among peers in career guidance and nutrition counselling. 	 Students will be able to identify adulterants in food samples. Understanding of various standard marks. 	1. Food testing using chemicals.	Project will be carried out.
AUGUS T	UNIT-4 FABRIC AND APPAREL Chapter-11: Design for fabric and apparel Chapter-12: Fashion Design and Merchandising. PRACTICAL Application in quality control techniques.	 Recognise the elements that contribute design Explain the application of design principles for fabric and apparel. Understand the elements of design Explain the significance of fashion design. Describe the fundamentals of fashion. 	 Tracing examples of textile designing. Tracing examples of textile designing. Colourful flow charts will be prepared. (Art integration) 	Assignments will be given topic wise and assertion reasoning assignment will be done.

		3. Explain the knowledge and skills required in fashion business.		
SEPTE MBER	UNIT-4 FABRIC AND APPAREL Chapter-15: Care and Maintenance of Fabrics in Institutions.	 Understand the significance of mass production of apparel. Describe the stages and system of mass production. Identify the fabric and garment defects before and after production. Understand the concept of quality and career in the garment manufacturing industry. Explain the need for care and maintenance of fabrics Describe the concept of care and maintenance of fabrics in hospitals and hotels 	1. Students will be regularly asked to revise the chapter.	1. Students will be given assignments based on topics covered involving the textbook questions and case based questions.
OCTOB ER	UNIT-5 RESOURCE MANAGEMENT Chapter-17: Hospitality Management Chapter-20: Consumer Education and Protection	 Explain the process and various equipment required. Identifying various career opportunities. Explain the concept and importance of human resource management. Describe the functions of human resource management 	Group discussions will be extensively conducted on qualities of water and water conservation.	Assignments & text book questions will be done and extra questions on HOTS.

		 professionals and identify their qualities. 5. Explain the importance and functioning of food and beverage in the hospitality industry. 6. Describe and discuss housekeeping and front office in the hospitality industry 3. Know the various career opportunities. 	3. Students will prepare leaflets and pamphlets on consumer education. (Art integration)	
	PRACTICAL 1. Removal of Stains - tea, coffee, curry, grease, blood, lipstick 3. Make a sample of block printing and tie and dye.	 The students will be able to relate to the importance and role of consumer education and production. Explain the basic concepts related to consumer education and protection 	1. Do stain removal testing.	Prepare block printing samples.
NOVEM BER	UNIT -6 DEVELOPMENT AND COMMUNICATIO N Chapter-21: Development ,Communication and Journalism	 .1. Understand the importance of development communication and journalism for social change and development. 2. Identify the skills required for a career in communication and journalism. 	 Students will be regularly asked to revise the chapter. Students will draft messages of the patriotic leaders and present in class which will be followed by critical analysis of levels of communication.(Desh Bhakti Curriculum) 	1. Students will be given assignments based on topics covered involving case based questions ,MCQS.

	PRACTICAL Analysis and discussion of print ,radio , electronic media.	 Know the importance of media and management Understand the process and scope of behaviour change communication and strategy. 		
DECEM BER	Revision of full syllabus.	Students will be able to identify their weak and strong areas of preparation.	Mock quiz in class for revision	Assignments will be taken up for revision involving previous year question papers. Sample papers will be revised.

HANSRAJ MODEL SCHOOL PUNJABI BAGH,NEW DELHI ACADEMIC PLAN SESSION : 2025-2026 SUBJECT : PSYCHOLOGY CLASS :12

MONTH	TOPIC/SUBTOPICS	LEARNING INTENTIONS	ACTIVITIES	ASSIGNMENTS
April	Chapter-1: Intelligence & Aptitude	 Students will be able to understand the psychological attributes Learn different methods that are used to assess the psychological attributes Learn about individual differences Understand the differences between intelligence & aptitude. 	 Students will be given assignments based on topics covered. Students will be regularly asked to revise the Chapter and Quiz will be taken. Layout will be prepared to study various models on intelligence. 	Students will prepare illustrations on models of intelligence. Students will be given the task of doing a random act of kindness by sharing food or clothes to a needy person as part of the Happiness curriculum.
	 Practical: 1. Introduction to Psychological testing 2. To conduct an Intelligence Test (RSPM) 	 They will conduct tests on their case study sample. Case study will be discussed. 	 They will conduct tests on their case study sample. Case study will be discussed. 	

	Practical : Conduction of AISS and Study of experimental Psychology	 They will conduct tests on their case study sample. Case study will be discussed. 	1. Case study will be discussed.	They will conduct tests on their case study sample.
May	Chapter-2: Self & Personality Practical: 1. To administer a personality test (SCQ)	 Students will be able to describe the concept of self, personality. They will be able to explain various approaches. Study of personality & its assessment. Practical: Students will gain confidence & expertise of conducting the psychological test on self. 	 Case study will be discussed. They will conduct tests on their case study sample. The students will be allotted activities to project their personalities using colors .(Art integration) 	Assignments will be given and an introspection exercise will be conducted.
July	Chapter-3: Human Strengths & Meeting Life Challenges		 Presentation / short film will be shown on coping with stress and examination anxiety. As part of Desh Bhakti curriculum the students will be motivated to design some slogans that will release stress and show their patriotic feelings. 	Assignments will be given topic wise for solving case based and picture based questions.
	Practical: 1. To administer a personality test (MPI)	Practical: Students will gain confidence & expertise of conducting the psychological test on self.	They will conduct tests on their case study sample. Case study will be discussed.	

August	Chapter-4: Psychological Disorders	 Students will understand the basic causes of abnormal behavior & factors that cause it. Students will understand the basic causes of abnormal behavior & factors that cause it. 	 Group discussion on substance abuse will be conducted. Flip charts /posters will be made for awareness drives among students. 	Assignments sheets will be given on NCERT based questions.
September	Chapter-5: Therapeutic approaches & Counseling	 Students will familiarize themselves with the process of psychotherapy. The students will understand the different therapies & related interventions. They will learn about rehabilitation. 	 Discussion on various therapies They will conduct tests on their case study subject. Preparation of mind maps as part of art integration. 	Assignments will be given on the HOTS based questions on various therapies.
	Practical: To administer an Aptitude Test (DBDA)	Practical: Students will gain confidence & expertise of conducting the psychological test on self.	Conduction and interpretation of the test.	
October	Chapter-6: Attitude & Social Cognition	 The students will analyze attitudes, how they are formed & changed. They will understand prosocial behavior. They will comprehend the concept of prejudice, discrimination. 	 Class discussion & assignment sheets will be conducted. Role play to be conducted on POX triangle. As part of Desh Bhakti curriculum the students will be motivated to role play on various freedom fighters and exemplify which attitude change were they highlighting. 	Revision assignments will be done.
November	Chapter-7: Social Influences & Group Processes	1. Students will understand the nature & types of groups & examine its effect on group behavior.	Group discussions will be extensively conducted to study group formation.	Assignments & text book questions will be done with practice of previous year questions and sample papers.

Revision of the Psychological tests.	1. They will discuss the process of co-operation & competition.	They will conduct tests on their case study sample.	Assignments will be based on previous year Board exams.
	2.They will understand inter-group conflict.		
	Practical: Students will gain confidence & expertise of conducting the psychological test on self.		

HANSRAJ MODEL SCHOOL PUNJABI BAGH, NEW DELHI CURRICULUM SESSION: 2025-2026 SUBJECT: ACCOUNTANCY CLASS: XII

MONTH	TOPIC / SUB-TOPICS	LEARNING INTENTIONS	ACTIVITIES / ASSIGNMENTS
April	Partnership CH 1-Fundamentals of partners hip	Meaning of Partnership Partnership Deed Profit & Loss Appropriation Account Partner's Capital Account To impart understanding skills	Assignment No. 1/ Role playing related to provisions of partnership deed
	CH 2 Goodwill-Nature & Valuation	Meaning & Nature of Goodwill Methods of valuation of Goodwill To impart analytical skills	PPT related to nature &valuation of Goodwill
May	CH 3 Change in profit sharing ratio	Sacrificing Ratio And Gaining Ratio	Assignment No. 2/
	CH 4 admission of a partner	Accounting Treatment of Goodwill	

		Revaluation of Assets and Liabilities	Video presentation as art integrated activity on change in profit sharing ratio.
July	CH 5 Retirement of a partner CH 6 Death of a partner CH 7 Dissolution of Partnership firm	To develop the understanding & problem solving skills of treatment of goodwill ,revaluation of assets & liabilities on the retirement & death of a partner as well as at the time of dissolution of firm.	Assignment No.3/ Creative art integrated video presentation on retirement /death/dissolution. Cross word puzzle based on terms used in partnership.
August	COMPANY ACCOUNTS CH 1 Issue of shares CH 2 Issue of debentures	To develop analytical skills of students as they learn about the types of shares & debentures and the ways they are issued to raise necessary capital of the company like issued at par or at premium.	Assignment No. 4/ quiz related to the chapter.
September	REVISION & HALF YEARLY EXAMS		
October	ANALYSIS OF FINANCIAL STATEMENTS.	To develop understanding skills for redemption of debentures including various terms like DRR	Assignment No.5 / PPT related to the topic.

	CH 1 Financial statements of a company CH 2 Financial statement analysis CH 3 Tools of Financial statement analysis		
November	CH 4 Accounting ratios CH 5 Cash flow statement	To develop technical skills of students in computing various ratios and also learning the way to prepare cash flow statement which will help them to prepare their projects as per CBSE.	topics/Comprehensive and specific project as per CBSE

HANSRAJ MODEL SCHOOL

PUNJABI BAGH, NEW DELHI

ACADEMIC PLAN

SESSION: 2025-2026

SUBJECT-BIOLOGY

CLASS-XII

MONTH	TOPIC/SUBTOPIC	LEARNING INTENTIONS/SKILL S DEVELOPMENT	<u>ACTIVITIES</u>	<u>ASSIGNMENTS</u>
APRIL	Unit: Reproduction Sexual reproduction in flowering plants	 1.Students will understand the parts & functions of flower 2. They will be able to explain the development of male & female gametophyte 3.They will understand the pollination & double fertilisation 4.They will be able to explain the development of seed & fruit 5.They will be able to explain special mode of reproduction-Apomixis 	 Flower dissection Slide showing pollen germination. Controlled pollination. 	Assignment sheet-1

	Unit: Reproduction Human Reproduction	1.Students will understand male & female reproductive system, anatomy of testis & ovary, 2.They will be able to explain Menstrual cycle, fertilization Embryo development & Implantation	 Slide of testis & ovary(to understand structure and function) Slide showing of Blastula. 	Assignment sheet-2
MAY	Unit :Reproduction Reproductive health	 Students will understand prevention of STD, Birth control method, MTP amniocentesis. They will explain - Infertility & ART 	To gather latest information about ART(newspaper and internet) 2. Population control measures. 3. Causes of Infertility.	Assignment sheet-3

MAY	Unit : Genetics &	1 Students will		Assignment sheet-4
	Evolution	understand .Mendelian	1. Pedigree analysis	
		inheritance,	(Through charts)	
	Principles of	2. They will		
	inheritance	understand-Deviation	2. Identification	
		from Mendelism-	genetic diseases.	
		Incomplete dominance,		
		Codominance, Multiple		
		alleles, Pleiotropy,		
		Polygenic inheritance,		
		3. They will be able to		
		explain sex		
		determination methods-		
		in humans, birds, honey		
		bee		
		4.They will understand-		
		Linkage & crossing		
		over		
		5.They will be able to		
		explain Sex linked		
		inheritance-		
		Haemophilia, Colour		
		blindness		
		Mendelian disorder-		
		Thalassemia		
		Chromosomal disorder-		
		down's syndrome,		
		Turner's syndrome,		
		Klinfelter's syndrome		
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JULY	Unit : Genetics & Evolution Molecular basis of inheritance	 1.students will understand the - DNA as genetic material Transforming principle Hershey & Chase experiment 2.They will explain - Structure of DNA & RNA 3.They will understand- DNA Replication, Meselson & Stahl Experiment, mechanism of DNA replication 4.They will understand- Central dogma, Transcription and Genetic code 5.They will explain- Translation, Gene expression & regulation- Lac Operon 6.They will understand- Human 	Human genome project. DNA finger printing. Isolate DNA from plant material Make complimentary sequence of nucleotides	1.Assignment sheet -5 2.Written explanation of experiments of different scientists
		Human Genome Project and DNA fingerprinting		
AUGUST	Unit : Biology in human welfare Microbes in human welfare	1.Students will understand the use of microbes in household food processing Industrial production Sewage Treatment	News reports Sewage treatment and Biogas	Assignment sheets-8

Unit : Biology in human welfare Human health & diseases	Energy Production 2. They will explain Biocontrol agent, Bio fertilizer, Antibiotics 1. Students will understand Pathogen, Parasites causing human diseases(Malaria, Dengue, Chikungunya, Filariasis) their control 2. They will explain basic concept of immunology, vaccine Cancer, HIV- AIDS Adolescence-drug & alcohol abuse	Immunology related research work. Study of slides showing various disease causing organismsand their life cycle	Assignment sheet-7 News report on communicable and Non- communicable disease.
Unit : Ecology Biodiversity & conservation	 Students will understand the concepts & patterns of biodiversity. They will explain loss & Conservation of biodiversity Hotspots, Endangered organisms. Extinction Red data book, biosphere reserves, National parks, Sanctuaries & Ramsar sites. 	Assignment sheet-12 Collect information on biosphere reserves, Hot spot and endangered species.	

<u>SEPTEMBER</u>	Unit : Ecology Organisms & Population	 Students will understand the They will explain Ecological adaptations, Population interaction (mutualism, competition etc) Population attributes (growth, birth rate etc) 	Assignment sheet-13	
	HALF YRARLY EXAM 2025-26			

OCTOPED	Unit , Diotophyology	1.Students will	Assignment sheet 0	
<u>OCTOBER</u>	Unit ; Biotechnology		Assignment sheet-9	
		understand -Genetic	Latest uses of	
		Engineering (r DNA	Biotechnology in	
		Technology),role of	everyday life(collect	
	Biotechnology	Restriction	material from newspaper,	
	Principles & Processes	endonuclease, Cloning	internet)	
		Vector		
		2. They will explain the		
		Process of Recombinant		
		DNA Technology,		
		Production of		
		Transgenic Individuals		
		and Downstream		
		Processing		
		Tiocossing		
NOVEMBER	Unit ; Biotechnology	1.Students will	Gather information about	Assignment sheet-10
		understand application	latest research in the field	-
		of Biotechnology in	of Biotechnology	
		health, Agriculture &		
	Biotechnology &	Industry	Study Details on tissue	
	Application	2. They will explain-	culture through videos	
		RNA i, Transgenic		
		animals		
		Gene Therapy,		
		Molecular diagnostics,		
		Ethical issues, Bio		
		piracy, Bio patent		
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Unit : Genetics &	1. Students will	Study homologous and	Assignment sheet-7
Evolution	understand the concept	analogous organs from	
	of Origin of life,	plants and animals	
Evolution	biological evolution &		
	evidence.		
	2. They will explain		
	Darwin's contribution.,		
	modern synthetic		
	theory, mechanism of		
	Evolution, variations &		
	natural selection, Hardy		
	Weinberg's Principle,		
	Adaptive radiation and		
	Human Evolution		



HANSRAJ MODEL SCHOOL PUNJABI BAGH, NEW DELHI Academic Plan SESSION: 2025-26

SUBJECT: Business Studies_____

CLASS: XII_____

MONTH	TOPIC / SUBTOPICS	LEARNING INTENTIONS	ACTIVITIES / ASSIGNMENTS
April	Nature and significance of Management	Students will be able to understand the concept of management. Objectives and importance of management. Nature of management as Science,Art and Profession. Role of top,middle and lower levels of management. Functions of management,Coordination- concept features ,importance. How to coordinate with others which helps in effective utilization of resources .	Assignment no-1 PPT Mind maps
	Principles of Management	Students will be able to understand the concept of principles of management. Significance of management.	Assignment-2 Crossword puzzle PPT

May	Principles of Management	Students will be able to understand Fayol's Principles of management. Principles and techniques of FW Taylor, value of team spirit.	Basketball match
	(cont.) Business Environment	Students will be able to understand the concept of business environment, its importance and dimensions of business environment. Demonetisation -concept Impact of govt policy changes on business with special reference to LPG in India.	Assignment 3
June		Summer Holidays	

July	Planning	After going through this chapter students will be able to describe Meaning and features of Planning Importance of Planning Steps involved in the process	PPT Assignment 4
	Organising	of Planning . Types of Plans	РРТ
		After going through this unit students ,the students will be able to: understand the concept of organising as a structure and as a process. functional and divisional structure of organisation, their features merits and demerits Understand the concept of formal and informal organisation. Understand the concept of delegation, its elements and importance. Concept and importance of decentralisation. Formal and Informal organisation concept.	Assignment 5

August	Staffing	Students will be able to understand the concept of Staffing , staffing as a part of Human Resource Management ,Steps of Staffing. Recruitment- meaning and typSelection- meaning and process. Training-meaning ,importance and methods of training. es.	Assignment 6 Group discussion
September	Directing	Half yearly examination followed by Directing Students will be able to understand concept, elements and the importance of directing.	Assignment 7 Role play

October Directing Controlling	Maslow's Hierarchy theory. Types of incentives . Concept and styles of Leadership Concept of communication- Forms, Barriers, Measures to overcome barriers. After going through this unit students will be able to understand Meaning,importance and process of Controlling.	Assignment 8
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Novembe	Financial Management	After going through this unit	Assignment 9
r		students will be able to	
		understand: Role of financial	PPT
		management. Concept of	
		financial planning . Concept of	
		capital structure, factors affecting	
		capital structure .	
		Concept of fixed and	
		working capital, factors	
		affecting.	Assignment 10
	Financial market		
		Understand the concept and	PPT
		functions of financial	
		market Meaning and	
		classification of Capital	
		market-Primary and	
		Secondary	
		Stock Exchange -	
		functions,SEBI Objectives and	РРТ
		functions	***
		Discussion on negative effects	Quiz based on brand
	Markating Management	of Price rigging and insiders	names,logos and tagline
	Marketing Management	trading.	names, 10g0s and taginie
		tudents will be able to understand	
		the concept of marketing. They	
		will be able to discuss	
		philosophies of marketing,	
		features and	
		functions of marketing	
		management.	
		Marketing mix – concept and	
		elements that are	ssignment 1a1
	Consumer Protection Act	price, product, place and	
		promotion.pc	a signment 11
		Concept of consumer protection	Poster on Rights of consumer

	Rights ,Responsibilities and remedies available to the consumer .Importance of Consumer Protection .	

HANSRAJ MODEL SCHOOL PUNJABI BAGH,NEW DELHI CURRICULUM SESSION: 2025-26 SUBJECT : CHEMISTRY CLASS : XII

MONTH		LEARNING INTENTIONS	ACTIVITIES	ASSIGNMENTS
MONTH April	<u>SUBTOPICS</u>	After studying this Unit, students will be able to • name haloalkanes and haloarenes according to the IUPAC system of nomenclature from their given structures; • describe the reactions involved in the preparation of haloalkanes and	ACTIVITIES Students will make comic strips to explain name reactions and reasoning based questions in an easy manner as an art activity.	(Quizzes made online for various topics will be shared from time to time for practising MCQs) IUPAC nomenclature based questions from solved examples, Intext questions and exercise questions will be given for practice.
		 preparation of haloalkanes and haloarenes and understand various reactions that they undergo; correlate the structures of haloalkanes and haloarenes with various types of reactions; use stereochemistry as a tool for understanding the reaction mechanism; appreciate the applications of organo- metallic compounds; 		Intext and a few exercise questions from NCERT textbook depending upon the topic discussed in the class ,will be given to students as an assignment.

		• highlight the environmental effects of polyhalogen compounds.		
May	Unit7 - Alcohols, Phenol & Ethers	 After studying this Unit, students will be able to name alcohols, phenols and ethers according to the IUPAC system of nomenclature; discuss the reactions involved in the preparation of alcohols from alkenes, aldehydes, ketones and carboxylic acids discuss the reactions involved in the preparation of phenols from haloarenes, benzene sulphonic acids, diazonium salts and cumene; discuss the reactions for preparation of ethers from (i) alcohols and (ii) alkyl halides and sodium alkoxides/aryl oxides; correlate physical properties of alcohols, phenols and ethers with their structures; discuss chemical reactions of the three classes of compounds on the basis of their functional groups. 	Detection of given functional groups in organic compounds will be done practically in chemistry lab.	Questions based on IUPAC naming, name reactions, conversions, reasoning etc will be discussed in the class along with every type of compounds and more questions will be given from the exercise in the NCERT textbook.
	Unit1- Solutions	 After studying this Unit, students will be able to describe the formation of different types of solutions; 		

 express concentration of solution in different units; state and explain Henry's law and Raoult's law; distinguish between ideal and non-ideal solutions; explain deviations of real solutions from Raoult's law; describe colligative properties of solutions and correlate these with molar masses of the solutes; explain abnormal colligative properties exhibited by some solutes in solutions. 	Group discussion about importance of remaining hydrated <i>during</i> sports activities and role of different solutions for sports injuries.	Neumericals and theoretical questions based on different concepts will be discussed in class followed by assigning similar questions from the NCERT textbook and exemplar exercise after every class
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July	Unit 8-Aldehydes, ketones & Carboxylic acids	 After studying this Unit, students will be able to write the common and IUPAC names of aldehydes, ketones and carboxylic acids; write the structures of the compounds containing functional groups namely carbonyl and carboxyl groups; describe the important methods of preparation and reactions of these classes of compounds; correlate physical properties and chemical reactions of aldehydes, ketones and carboxylic acids, with their structures; explain the mechanism of a few selected reactions of aldehydes and ketones; understand various factors affecting the acidity of carboxylic acids and their reactions; describe the uses of aldehydes, ketones and carboxylic acids. 	Chemical distinction tests will be performed by the students in chemistry lab.	Questions based on IUPAC naming, name reactions, conversions, reasoning etc will be discussed in the class along with every type of compounds and more questions will be given from the exercise in the NCERT textbook. Students will be asked to do all MCQs from the NCERT Exemplar.
	Unit 9- Amines	 After studying this Unit, students will be able to describe amines as derivatives of ammonia having a pyramidal structure; classify amines as primary, secondary and tertiary; name amines by 	Students will be asked to carry out an activity in the form of art integrated project to show preparation uses of dyes/colours.	Specific NCERT textbook and exemplar questions (Apart from the ones done in class) will be given as assignment

 and tertiary amines; describe the method of preparation of diazonium salts and their importance in the synthesis of a series of aromatic compounds including azo dyes.

	Unit3-Chemical Kinetics	 After studying this Unit, students will be able to define the average and instantaneous rate of a reaction; express the rate of a reaction in terms of change in concentration of either of the reactants or products with time; distinguish between elementary and complex reactions; differentiate between the molecularity and order of a reaction; define rate constant; discuss the dependence of rate of reactions on concentration, temperature and catalyst; · derive integrated rate equations for the zero and first order reactions; determine the rate constants for zeroth and first order reactions; 	To study the effect of concentration of the reactant on the rate of the reaction, an experiment will be carried out followed by plotting of graph to understand the order of reaction. Students to be taught to use lab apparatus carefully and should be responsible enough to not to damage school property (DC).	NCERT textbook exercise and exemplar questions on every topic will be given as an assignment after discussing the solved examples and Intext questions on respective topics.
September	Half yearly Examination.			

October	Unit4- d & f -Block Elements	 After studying this Unit, students will be able to learn the positions of the d- and f-block elements in the periodic table know the electronic configurations of the transition (d-block) and the inner transition (f-block) elements appreciate the relative stability of various oxidation states in terms of electrode potential values; describe the preparation, properties, structures and uses of some important compounds such as K₂Cr₂O₇ and KMnO₄. understand the general characteristics of the d- and f-block elements and the general horizontal and group trends in them; describe the properties of the f-block elements and give a comparative 	An art activity of making mind maps for salt analysis schemes will be taken up by students. Art based activity to show applications of d&f block elements as crossword puzzle or in the form of any other interesting game will be made by students.	NCERT solved examples,Intext and exercise questions will be given as assignment.
	Unit5- Co-ordination compounds	 account of the lanthanoids and actinoids with respect to their electronic configurations, oxidation states and chemical behaviour. After studying this Unit, students will be able to appreciate the postulates of Werner's theory of coordination compounds; know the meaning of the terms: 		

		 coordination entity, central atom/ ion, ligand, coordination number, coordination sphere, coordination polyhedron, oxidation number, homoleptic and heteroleptic; learn the rules of nomenclature of coordination compounds; write the formulas and names of mononuclear coordination compounds define different types of isomerism in coordination compounds; understand the nature of bonding in coordination compounds in terms of the Valence Bond and Crystal Field theories; appreciate the importance and applications of coordination compounds in our day to day life 	Students will be asked to make mindmap for IUPAC naming and applications of Coordination compounds.	NCERT textbook exercise and exemplar questions on every topic will be given as an assignment after discussing the solved examples and Intext questions on respective topics.
November	Unit10- Biomolecules	 After studying this Unit, students will be able to explain the characteristics of biomolecules like carbohydrates, proteins and nucleic acids and hormones; classify carbohydrates, proteins, nucleic acids and vitamins on the basis of their structures; explain the difference between DNA and RNA; describe the role of biomolecules in biosystem 	Students will be guided to use Adobe applications like text to image to show applications/ importance of biomolecules for industry, sports , art and daily life.	NCERT exercise questions and questions from board papers of previous years' will be given as assignments.

Hansraj Model School, Punjabi Bagh, New Delhi CURRICULUM PLAN

Session: 2025-2026

Computer Science (083)

Class: XII

Month	Topic / Sub Topics	Learning intentions	Activities	Assignments
April	 Unit I: Computational Thinking and Programming – 2 Revision of Python topics covered in Class XI. 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) 	 To be able to: understand function types, parameter types, scope of variables define functions create modules reuse code 	Warm -Up Discussion: Ask students: "If you were throwing a party, what are all the things you would have to do?" Encourage them to think of clear, specific tasks like: • Send invitations • Decorate the room • Arrange Food • Play music • Welcome guests Group Brainstorm: Create "Party Functions" write down responses as function names: def send_invitations(): def decorate_room(): def order_food(): def play_music(): def welcome_guests():	 MCQ Quizzes: Quiz 1 : Based on Python Basics Quiz 2 : Based on Python Data Types, Built-In functions Quiz 3: Based on function, parameters and local, global variable scope. Practical Assignment No. 1 (Based on User Defined Functions in Python)
May	 Unit I: Computational Thinking and Programming – 2 Exception Handling: Introduction, handling exceptions using try-except- finally blocks. Data Structure: Stack operations on stack (push & 	 To be able to: differentiate between errors and exceptions write code to handle common exceptions and customise error messages understand the applications of stack in computing 	Debugging Challenge - Fix the Code: Code snippets with intentional errors and exceptions will be provided to students and they will point and fix the errors. Tower of Hanoi Puzzle	 Practical Assignment No. 2 (Based on Python Exceptions) Practical Assignment No. 3 (Based on Stacks using Lists in Python)

	 pop), implementation of stack using list. Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths 	 compare text file with binary file differentiate between text and csv file 	Scavenger Hunt	
	• 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	• read/ write from a text file in different ways	Simulate the Actions of Digital Diary App to Add Entry and View All Entries: Students will list the steps like: open diary , place pointer at the end, write new journal etc. which will build the concept of reading / writing and moving file pointer in files.	Practical Assignment No. 4 (Based on Text Files in Python) MCQ Quizzes: Quiz 4: Identify errors in code Quiz 5: Stack Implementation Quiz 6: File Handling
July	 Unit I: Computational Thinking and Programming – 2 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 	To be able to: • read/ write from a binary file in different ways • compare text file and csv file • read/write from a csv file		Practical Assignment No. 5 (Based on Binary Files in Python)
	• CSV file : import csv module, open / close csv file, write into a csv file using writer(),writerow(),writerows() and read from a csv file using reader()		Exploring csv datasets on Git Hub / Kaggle.com	Practical Assignment No. 6 (Based on CSV Files in Python) MCQ Quizzes: Quiz 7: Binary & CSV Files

August	 Unit III: 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) 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 	To be able to: • download and configure MySQL software • design database schema and implement it using DDL statements • identify and apply keys and constraints on table fields • analyse problems and write suitable SQL queries using DQL. • manipulate table data using appropriate DML statement • write complex queries using aggregate functions, GROUP BY, HAVING clause • construct queries to retrieve data from multiple tables • evaluate the output produced by SQL queries using joins and functions	Explore IPL /Any Game Dataset : (map a real world problem into a database schema) Students will form groups to download and explore the dataset from an open repository and frame 5 questions and also find solutions by applying SQL queries on it.	Practical Assignment #7 (Based on DDL) Practical Assignment #8 (Based on DML) Practical Assignment #9 (Based on DQL) Practical Assignment No. 10 (Based on Group functions & GROUP BY/ HAVING) Practical Assignment No. 11 (Based on Joins)
	Interface of python with an SQL database: connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using	 install mysql-python- connector / pymysql in Python 	Research data set for Project Work	Practical Assignment No. 12 (Based on SQL Python Connectivity)

	connect(), cursor(), execute(), commit(), fetchone(), fetchall(), rowcount, creating database connectivity applications, use of %s format specifier or format() to perform queries.	 use database concepts, SQL along with connectivity between Python and SQL create a Python interface and perform SQL operations using Python SQL connectivity 		Quiz 8 : Based on DB Concepts Quiz 9 : Based on SQL
September	Revision Half Yearly Exams		Creating Memory Maps for revision	Solving SQPs
October	 Unit II: Computer Networks Evolution of networking: (ARPANET, NSFNET, INTERNET) Data communication terminologies: (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 (PAN, LAN, MAN, WAN) and Network types (Bus, Star, Tree) Network protocol: HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP 	 To be able to: learn terminology related to networking and internet. suggest appropriate the cable layout, transmission media and network type for a given case study. understand and identify different protocols and their purpose compare static and dynamic Markup languages 	Lab Board Decoration with relevant news articles	Worksheet on Network Case Study questions Competing Project work in Lab

	• Introduction to web services: WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting Project Work			
November	Sample paper solution and Revision	 To be able to consolidate concepts apply the understanding of concepts to solve problems 	Creating Topic-wise Mind Maps	Discuss previous year question papers Competing Project work in Lab
December		 To be able to consolidate concepts overcome mistakes apply knowledge to solve questions manage time better to solve paper questions 	-	CBSE Sample Paper, Previous year CBSE paper

HANSRAJ MODEL SCHOOL PUNJABI BAGH, NEW DELHI CURRICULUM SESSION: 2025-26 ECONOMICS CLASS-XII

MONTH	UNIT/TOPICS	LEARNING INTENTIONS (Learning outcomes+Competencies)	ACTIVITIES	ASSIGNMENTS
April	 Development experience (1947-90) Indian economy on the eve of independence Agricultural Sector Industrial Sector Foreign Trade Demographic condition Occupational structure and infrastructure development 	Students will be able to apply the knowledge for understanding state of Indian economy on the eve of independence	PPT, TIMELINE THROUGH FLOW CHART,	Assignment All types of MCQ'S
	 Indian economy 1950-1990 Economic planning, goals of economic planning Agricultural sector-problems and policies, Debate on subsidies Role of Public Sector Industrial policy resolution 1956 Role of small scale industries Inward looking trade strategy 	Students- Assimilate about choice of Mixed economic system in India after Independence Grasp and understand Era of economic planning and long term goals of economic planning Land reform measures adopted to solve land related problems Adoption of new agricultural strategy resulting in green revolution Analyse positive and negative impact	ALPHABET QUIZ PPT, CROSSWORD PUZZLE	

or import substitution policy Critical evaluation of industrial and trade policies	of agricultural policies Enhance Critical thinking Encourage Problem solving	

MAY	 New Economic Policy 1991 Introduction Need for economic reforms Features of new economic policy 1991 Meaning and objectives of economic reforms Liberalization measures Privatization meaning Ways of Privatisation Globalisation meaning Outsourcing WTO and its functions Critical Evaluation of reforms 	Students- Relate the serious consequences of policies of 1950-1990 and background of 1991 crisis Figure out the reasons for adoption of new economic policy Perceive the characteristics of Economic reforms Understand objectives of economic reforms Analyse liberalization measures Develop the skills of learning new,complex things and new situations Able to know about Privatisation, its need and Benefits Understand disinvestment Analyse how Indian Economy be the favourite destination of outsourcing Evaluate India's responsibilities as a member of WTO. Critically analyse the impact of reforms on various sectors of Economy. Develop skills of logical reasoning and critical thinking.	PPT, PODCAST PICTURE QUIZ. SNAKES AND LADDER ACTIVITY	Assignment Short/Long answer type questions Assignment Evaluation based questions
JULY	 MACRO ECONOMICS National income Accounting-Basic concepts 			

Circular flow of income	
Methods of measurement of National Income Students- Comprehend circular flow of income VIDEO, PPT	Assignment (Numericals)

	Meaning of Real GDP Nominal GDP Welfare, Economic and social welfare. Limitations of GDP as an indicator of Economic welfare.	Understand the meaning of real and nominal GDP Know the procedure to convert nominal GDP to nominal GDP Identify the limitations of GDP as an indicator of Economic welfare.		
•	Money and Banking Meaning and functions of money Money supply Money creation by commercial banks Functions of central bank	Students- Understand the meaning of money and functional definition of money. Know about the functions of money Meaning and difference of Central and Commercial banks to be understood along with money creation process by Commercial banks and functions of central bank.	FLOW CHART PPT, MIND MAPPING	Assignment MCQ'S of all types Assignment Source based questions
•	Govt Budget and Economy Meaning Format and structure of Govt. Budget Budgetary deficits Objectives of Govt Budget	Know about meaning and format of Government budget Understand and classify type of budgetary receipts as Revenue and Capital receipts. Identify and classify Budgetary expenditure as Revenue and Capital Expenditure Analyse various budgetary deficits as Revenue deficit, Fiscal deficit and Primary deficit. Understand various objectives of Govt. Budget.		

AUGUST	• Human capital formation Sources and importance of Human Capital Formation in India	Understand Meaning of Human capital, human capital formation and human development They will be able to know about sources of human capital formation Role of human capital formation in economic development and also the importance of human capital formation in India. Evaluate the future prospects and various problems in human capital formation in India.	VIDEO,STORY LINE	Assignment Source based competency questions
	• Rural Development Key issues- Rural Credit Marketing Diversification Oraganic farming	Grasp and Comprehend Issues under rural development. Will have the knowledge of sources of rural credit,challenges and measures. Will have understanding of agricultural marketing, channels of agricultural marketing, problems and measures undertaken by the Government to improve agricultural marketing system They will have the knowledge of agricultural diversification and organic farming. They will be able to develop Analytical and Problem solving skills.	RACE	Assignment Case study based questions

	• Foreign exchange and BOP Types of Foreign exchange rates Determination of Flexible Exchange rate Format of BOP	Grasp and understand the concepts of foreign exchange, Foreign exchange rates, foreign exchange market Types of foreign exchange rates as- Fixed exchange rate Floating exchange rate Managed Floating exchange rate. Determination of foreign exchange rates Meaning of balance of payments, components of balance of payments. Deficits in BOP Develop skills to observe the BOP position of India	PPT, CONCEPT MAP	Assignment Example based questions
SEPTEMBER	REVISION HALF YEARLY EXAMINATION			
OCTOBER	• Theory of income and employment	Comprehend the basic concepts like Ex-ante, expost, aggregate demand, aggregate supply,APC,APS,MPS,Investment multiplier. They can relate and understand the Keynesian theory of income and employment with all the basic concepts. They can analyse the situations of excess and deficient demand	PPT,	Assignment (Numericals) Short and long answer type questions

		Know and apply the measures to check both situations. Develop critical thinking, application and Analytical skills.		
	• Employment and growth issues	Various issues relating to employment will be studied by the students like nature, quality of employment,distribution of workforce, Type of workers, jobless growth, informalisation and casualisation of workforce issues will also be understood by the students Various causes of unemployment, impact and measures undertaken will be understood by the students.	PPT, QUIZ	Assignment Analysis based questions
NOVEMBER	• Environment and sustainable development	Various issues relating to employment will be studied by the students like nature, quality of employment,distribution of workforce, Type of workers, jobless growth, informalisation and casualisation of workforce issues will also be understood by the students Various causes of unemployment, impact and measures undertaken will be understood by the students.	COLLAGE MAKING	Assignment Picture based questions

• Development experience of India- a comparison with neighbours Comparative Study Of India With China And Pakistan	Compare the development paths of India , China and Pakistan They can compare these countries on the basis of demography, growth rates, sectoral contribution in the growth process. Develop skills to do critical analysis of development experience of India China and Pakistan	VIDEOS, PPT, QUIZ	Assignment Analytical questions
			Preparation for Preboard examination

HANSRAJ MODEL SCHOOL PUNJABI BAGH, NEW DELHI ACADEMIC PLAN SESSION: 2025- 2026 SUBJECT: ENGINEERING GRAPHICS CLASS: XII

MONTH	TOPIC/	LEARNING INTENTIONS	ACTIVITIES	ASSIGNMENT
	SUBTOPICS			
April	Isometric projection	Understands isometric projection	Activity (includes art integration) :	Draw iso-scale
	• Iso scale	Able to draw iso-scale & knows its purpose	Make model of prisms and pyramids by paper folding and analyze solids in horizontal and	Assignment-1 on isometric projection
	• Single solid	Able to draw single solid in vertical & horizontal position	vertical positions	
	• Double solid	Able to draw one solid over another in different combination		
May	Machine parts (To full size scale) • Threads	Understands the use of different types of fasteners	Activity : Study the models of nuts	Assignments on Machine Parts – (To full size scale)
	NutsBolts	Able to draw views of different fasteners with standard dimensions	and bolts and analyze different views.	Assignment – 2 on Threads
				Assignment -3 on Nuts & Bolts
			Project: Soft & Hard copy of isometric & orthographic views of	Assignment -4 on combination of Nut & Bolt

	Project-Collabcad	Can draw iso & orthographic views using cad software	15 simple solids (Follow instructions from CAD PROJECT	
July	Machine parts (free hand sketches) • Studs • Rivets • Screws Machine blocks (15 blocks)	Understands the purpose of free-hand sketching Able to draw free hand sketches of fasteners Able to draw isometric view & missing view from two given views.	Activity (teaching moral values also) Draw and cut the models of prescribed machine blocks(Take care of your surroundings and keep it clean during the activity)	Assignment -5 on Machine parts - free hand sketches Assignment – 6 on Machine blocks
August	Assembly/ disassembly Bearings • Open bearing • Bushed bearing Rod joints • Sleeve & cotter joint • Gib & cotter joint	Knows the details of all parts of bearings & rod joints Able to assemble different types of bearings & rod joints Understands different types of section	Activity : Study the model of bearings and rod- joints from different angles.	Assignment -7 on Assembly/Disassembly of Machine Parts Assembly of Question No1-4

September	 Bearings & 	Able to disassemble different types of bearings & rod joints		Assignment – 7
	Rod joints			Disassembly of Question No. 1-4
October	Tie rod & pipe joint • Turnbuckle • Flange pipe joint	Knows the details of all parts of tie rod & pipe joint, couplings & pulley Able to assemble tie rod & pipe joint, couplings & pulley Understands different types of section	Activity : Study models of Tie-rod ,pipe joint for different type of views	Assignment No-7 Assembly of Question No. 5&6
November	Tie rod & pipe joint	Able to disassemble Tie rod & pipe joint,		Assignment NO 7 Disassembly of Question No. 5&6

Hansraj Model School, Punjabi Bagh, New Delhi CURRICULUM PLAN Session: 2025-2026

Informatics Practices (065)

Class: XII

Month	Topic / Sub Topics	Learning intentions	Activities	Assignments
April	 Unit 1: Data Handling using Pandas -I Introduction to Python libraries- Pandas, Numpy, Matplotlib. Data structures in Pandas - Series and Data Frames. Series: Creation from – ndarray, dictionary, scalar value; mathematical operations; Head and Tail functions; Selection, Indexing and Slicing. 	 To be able to: install Pandas, Matplotlib create Series from different data types access and modify data within Series using positional and label based indexing perform slicing, arithmetic operations on Series use Series attributes and methods understand how series can be used as building blocks for data frame 	Analyse real world data sets and store it in a Series. eg. No. of steps walked in a weekday, Price of favourite items in a store, list of career options etc.	Practical Assignment No. 1 (Based on Pandas Series Creation and Operations)
Мау	 Unit 1: Data Handling using Pandas -I Data Frames: creation - from dictionary of Series, list of dictionaries, Text/CSV files; display; iteration; Operations on rows and columns: add, select, delete, rename; Head and Tail functions; Indexing using Labels, Boolean Indexing; Importing/Exporting Data between CSV files and Data Frames. 	 To be able to: create data frame in different ways and apply various operations Import/ Export data between SQL database and Pandas perform analysis on data in a csv file by using pandas data structures in Python 	Data Detective – Explore Your Own Dataset Students download a data set of their choice and create 5 questions on it	Practical Assignment No. 2 (Based on Pandas Data Frame Creation and Operations)

July	 Unit 1: Data Handling using Pandas -I Data Visualization : Purpose of plotting; drawing and saving following types of plots using Matplotlib – line , bar , histogram. Customizing plots: adding label, title, legend 	 To be able to: visualize data by creating appropriate plots using pyplot library 	 Tell a Visual Story – Students will create different plots on topics the following topics: Daily temperatures for a week, My Score Card, Number of daily time on social media 	Practical Assignment No. 3 (Based on Data Visualization)
	 Unit 4: Societal Impacts 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. E-waste: hazards and management. Awareness about health concerns related to the usage of technology. 	 Identify internet security issues and configure browser settings. Understand the impact of technology on society including gender and disability issues 	 Show a Video/ Movie on – List of Cyber Crimes with real life stories of victims. Explore X Report 2 latest posts by victims on CyberDost Handle Digital Collage on Cyber Crimes or Cyber Laws 	
August	Revision of database concepts and SQL commands done in class XI Unit 2: Database Query using SQL • Math functions: POWER (), ROUND (), MOD() • Text functions: UCASE ()/UPPER (), LCASE()/LOWER (), MID ()/SUBSTRING ()/SUBSTR (), LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM ().	 To be able to: Predict the output of SQL functions Apply SQL functions while writing SQL queries 	 SQL Function Treasure Hunt Based on the table: Student(rn, name, age,score, dateofbirth) Students will be given clue cards having questions like: Find the name of the student with the longest name. Round off all scores to the nearest whole number Display the birth month of a given student 	Practical Assignment No. 4 (Based on User Defined Functions in Python)

August	 Date Functions: NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (), DAYNAME (). Unit 2: Database Query using SQL Aggregate Functions: MAX (), MIN (), AVG (), SUM (), COUNT (); using COUNT (*). GROUP BY, HAVING, ORDER BY Clauses EQUI Join 	 To be able to: write complex queries using aggregate functions, GROUP BY, HAVING clause construct queries to retrieve data from multiple tables evaluate the output produced by SQL queries using joins and functions 	Students will have to write the name of the SQL function used in the given question. Identify Related Tables	Practical Assignment No. 5 (Based on SQL Group functions & GROUP BY/ HAVING) Practical Assignment No. 6 (Based on Equi Join in SQL)
September	Revision Half Yearly Exams	To be able toConsolidate and apply concepts learned	Creating Memory Maps for revision	Solving SQPs
October	 Unit 3: 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 plugins, cookies. 	 To be able to: learn terminology related to networking and internet. identify types of networks based on geographical spread and arrangement of nodes list a few network devices decide and suggest most effective network topology on the basis of different parameters compare static and dynamic websites install/ uninstall plug-ins and add-ons in web browser 	Lab Board Decoration with relevant news articles	Competing Project work in Lab

November	Sample paper solution and Revision for Pre Board Exams	 To identify gaps in their understanding To reinforce the retention and application of knowledge by revisiting and practicing previously learned material. 	Creating Topic-wise Mind Maps	Discuss previous year question papers Competing Project work in Lab
December	Revision for Pre Board Exams	• To reinforce the retention and application of knowledge by practicing questions		Solve CBSE Sample Papers

HANSRAJ MODEL SCHOOL PUNJABI BAGH, NEW DELHI CURRICULUM PLAN SESSION: 2025-2026 CLASS:_XII SUBJECT: _PHYSICAL EDUCATION

MONTH	TOPIC / SUBTOPICS	LEARNING INTENTIONS	ACTIVITIES /
		(Learning outcomes+Competencies	ASSIGNMENTS
APRIL	Unit I Management of Sporting Events • Functions of Sports Events Management (Planning, Organising, Staffing, Directing & Controlling)	1. After getting complete knowledge regarding fixtures etc. students can independently organize interclass tournaments etc.	Inter Class Competition for class XII
	 Various Committees & their Responsibilities (pre; during & post) Fixtures and its Procedures – Knock-Out (Bye & Seeding) & League (Staircase & Cyclic) Intramural & Extramural tournaments – Meaning, Objectives & Its Significance Community sports program (Sports Day, Health Run, Run for Fun, Run for Specific Cause & Run for Unity) 	 They will be able to conduct specific sports (Run for fun) marathons to collect funds for a noble cause. To teach them about the different types of tournaments and the detailed procedure of drawing fixtures for Knock Out, League Tournaments, and Combination tournaments To teach them about the different types of community sports and their importance in our society SKILL DEVELOPMENT CRITICAL THINKING PROBLEM SOLVING 	Assignment of the topic
APRIL	Children & Women in Sports 1. Exercise guidelines of WHO for different age groups. Common Postural Deformities - Knock Knee; Bow Legs; Flat Foot; Round Shoulders;	 To make students understand the exercise guidelines of WHO for different age groups To make students aware of the common postural deformities To make students aware of women's sports participation in India and about the special 	Quiz based on the topic Assignment on topic

	Lordosis, Kyphosis, and Scoliosis and their corrective measures Special consideration (Menarche & Menstrual Dysfunction) Female Athletes Triad (Osteoporosis, Amenorrhea, Eating Disorders)	 conditions of women. To make students understand menarche and menstrual dysfunction among women athletics To make them understand about female athlete triad. 	
MAY	Yoga as Preventive measure for Lifestyle Disease 1. Obesity: Procedure, Benefits & imp; Contraindications for Tadasana,Katichakrasana,Pavanmuktasana, Matsayasana, Halasana, Pachimottansana, Ardha– Matsyendrasana, Dhanurasana,Ushtrasana, Suryabedhanpranayama. 2. Diabetes: Procedure, Benefits & amp; Contraindications for Katichakrasana, Pavanmuktasana,Bhujang asana, Shalabhasana, Dhanurasana, Suptavajarasana,Paschimottanasan-a, Ardha-Mastendrasana,Mandukasana,Gomukasana, Yogmudra,Ushtrasana, Kapalabhati. 3. Asthma: Procedure, Benefits & amp; Contraindications for Tadasana, Urdhwahastottansana, UttanMandukasan-a, Bhujangasana, Dhanurasana, Ushtrasana, Vakrasana, Kapalbhati, Gomukhasana Matsyaasana, Anuloma Viloma. 4. Hypertension: Procedure, Benefits & amp; Contraindications for Tadasana, Katichakransan, Uttanpadasana, Ardha Halasana, Sarala Matyasana, Gomukhasana, UttanMandukasan-a, Vakrasana, Bhujangasana, Makarasana, Shavasana, Nadishodhanapranayam, Sitlipranayam. 5. Back Pain and Arthritis: Procedure, Benefits & amp; Contraindications of Tadasan, Urdhawahastootansana, Ardh-Chakrasana, Ushtrasana, Vakrasana, Sarala Maysyendrsana, Bhujandgasana, Gomukhasana, Bhadrasana, Makarasana, NadiShodhana pranayama.	 Students will be able to gain complete knowledge about Asanas. After gaining knowledge, they will be able to control obesity With practice of Asanas, students will be able to keep themselves free from diseases i.e. Back-pain, Diabetes, Asthma etc. PHYSICAL FITNESS & WELLNESS ANALYTICAL ABILITY COMMUNICATION SKILL 	Quiz on the Topic Assignment on the topic

JULY	Physical Education and Sports for CWSN (Children with Special Needs - Divyang)	1. Students will gain knowledge about the types of disabilities.	Chart of Etiquettes associated with CWSN Assignment on topic
	1. Organizations promoting Disability Sports (Special Olympics; Paralympics; Deaflympics) 2. Concept of Classification and Divisioning in Sports.	2. They will come to know about various exercises for children with special need.	
	3. Concept of Inclusion in sports, its need, and Implementation;4. Advantages of Physical Activities for children with special needs.	3. They will gain knowledge, how to make strategies for children with special need.	
	5. Strategies to make Physical Activities assessable for children with special needs	COGNITIVE SKILLS WELLNESS BEHAVIOURAL SKILL	
JULY	Unit V Sports & Nutrition	1. Students will be able to keep themselves fit after knowing the value of a balanced diet and pitfalls of dieting etc.	Poster/Chart on healthy diet Assignment on topic
	 Concept of balanced diet and nutrition Macro and Micro Nutrients: Food sources & amp; 	 Students will be able to prepare diet charts for pre, during & post competition. 	
	functions 3. Nutritive & amp; Non-Nutritive Components of Diet	COGNITIVE SKILLS ANALYTIC SKILLS	
	4. Eating for Weight control- A Healthy Weight, The		
	Pitfalls of Dieting, Food Intolerance, and Food Myths		
	5. Importance of Diet in Sports-Pre, During and Post competition Requirements		
AUGUST	Unit VI Test & Measurement in Sports	1. Students will be able to use the various test and methods to measure the abilities of a person.	Conduct of Senior Citizen Fitness Test Assignment on topic

	 o Age group 5-8 yrs/ class 1-3: BMI, Flamingo Balance Test, Plate Tapping Test o Age group 9-18 yrs/ class 4-12: BMI, 50mt Speed test, 600mt Run/Walk, Sit & Reach flexibility test, Strength Test (Abdominal Partial Curl Up, Push-Ups for boys, Modified Push-Ups for girls). © Computing Basal Metabolic Rate (BMR) © Rikli & Jones - Senior Citizen Fitness Test I. Chair Stand Test for lower body strength II. Arm Curl Test for upper body strength III. Chair Sit & Reach Test for lower body flexibility IV. Back Scratch Test for upper body flexibility V. Eight Foot Up & Go Test for agility VI. Six Minute Walk Test for Aerobic Endurance 	2. They will be able to understand the various tests to rectify the health problems relating to different body parts. PHYSICAL FITNESS & WELLNESS ANALYTICAL ABILITY	
AUGUST	 Unit VII Physiology & Injuries in Sports 1. Physiological factors determining components of physical fitness 2. Effect of exercise on the Muscular System 3. Effect of exercise on the Cardio-Respiratory System 4. Physiological changes due to aging 		Make Chart on Effects of Exercises on Different Human body Organs Assignment on topic

	5. Sports injuries: Classification (Soft Tissue Injuries - Abrasion,		
	Contusion, Laceration, Incision, Sprain & amp; Strain; Bone & amp; Joint Injuries - Dislocation, Fractures -		
	Green Stick, Comminuted, Transverse		
	Oblique & Impacted)		
Sept	Half Yearly (Revision)	Half Yearly (Revision)	
	Revision of chapters 1,2,3,5,6 &7	Revision of chapters 1,2,3,5,6 &7	
Oct	Unit VIII Biomechanics & Sports	1. They will be able to differentiate the movement while flexion & extension.	Conduct of games applying Laws of Motion
	2. Types of Levers and their application in Sports.	2. After gaining proper knowledge of Newton's Law of Motion, they will be able to enhance their performance in	Assignment on topic
	3. Equilibrium – Dynamic & amp; Static and Centre of	sports.	
	Gravity and its application in sports	3. Students will be able to make better use of muscles	
	4. Friction & amp; Sports	while running, jumping & throwing	
	5. Projectile in Sports		
Oct	Unit IX Psychology & Sports	1. Students will be able to cope up with the stress &	Chart of different Body
	Psychology and Sports	anxiety.	Types Assignment on topic
	1. Personality; its definition & types (Jung Classification & amp; Big Five Theory)	2. After they understand the coping strategies, they will be able to handle the stressful situation.	
	2. Motivation, its type & amp; techniques.	3. With the knowledge of motivation techniques, they will	
	3. Exercise Adherence: Reasons, Benefits & amp;	be able to lead a healthy & successful life.	

	Strategies for Enhancing It 4. Meaning, Concept & amp; Types of Aggressions in Sports 5. Psychological Attributes in Sports – Self-Esteem, Mental Imagery, SelfTalk, Goal Setting	PHYSICAL FITNESS & WELLNESS	
NOVEMBER	 Unit X Training in Sports Concept of Talent Identification and Talent Development in Sports Introduction to Sports Training Cycle – Micro, Meso, Macro Cycle. Types & Method to Develop – Strength, Endurance and Speed 	 After getting complete knowledge regarding fixtures etc. students can independently organize interclass tournaments etc. They will be able to conduct specific sports (Run for fun) marathons to collect funds for a noble cause. 	Conduct of different exercises in groups to develop Strength, Endurance, Flexibility & Coordinative Abilities Assignment on topic
	 Types & Method to Develop – Flexibility and Coordinative Ability. Circuit Training -Introduction & Cortain Content C	COGNITIVE SKILLS ANALYTIC SKILLS	

HANSRAJ MODEL SCHOOL PUNJABI BAGH, NEW DELHI ACADEMIC PLAN SESSION: 2025-2026 SUBJECT: PHYSICS CLASS: XII

MONTH	TOPIC / SUBTOPICS	LEARNING INTENTIONS	ACTIVITIES	ASSIGNMENT S

			1	
April	Chapter -Electric Field and charges Coulomb's Force, electric field, dipole, Gauss Law and its applications Chapter- Electric Potential and capacitance Electric potential, potential difference, capacitance of parallel plate capacitor with and without dielectric,)	Student will be able to * Understand concept of electrostatic force and field. *State the Coulomb's law of electrostatic force. *Apply the concept of static electricity in selection of clothes as per the weather conditions *By using the concept of electrostatics students can protect themselves from lightning. *Understand the concept potential. * Understand the electric dipole and electric field due to an electric dipole. SKILL DEVELOPMENT Critical Thinking Problem Solving	Activity * To demonstrate methods of charging (frictional electricity, conduction and induction)using electroscope.	ASSIGNMENT 1 ELECTROSTATIONS S.pptx https://docs.google com/presentation/o 1nghI5EO-JWEkvy YsOICGk6wqrkJ_ LwW/edit?usp=dr esdk&ouid=11741 855943371959813 &rtpof=true&sd=t e https://drive.googl com/file/d/1Xwna 4VrF9u_CeuvOj7o T371IxcnTi4/view usp=sharing https://docs.google com/document/d/1 zZcGVORzeLhaz1 mVtVHrgCb2BkS Oy/edit?usp=shari g&ouid=11741485 943371959813&rtt of=true&sd=true

May	Chapter- Electric Potential	Student will be able to	Activity	Assignment
0	and capacitance(ctd)	*Understand the concept of	*Using regulators of a	https://docs.google.
	combination of capacitors,	capacitor and in what form is	fan ,the construction and	com/document/d/14
	energy stored in capacitor(only	the energy stored in the	working of capacitors will	zZcGVORzeLhazF
	formula)	capacitor.	be discussed.	mVtVHrgCb2BkSrf
	<i>,</i>	Student will be able to:		Oy/edit?usp=drives
	Chapter-Current Electricity	*Understand the concept of	Activities :	dk&ouid=11741485
	Electric current, flow of	electric current and	i.To demonstrate the emf of	<u>5943371959813&rt</u>
	electric charges in a metallic	potential difference.	a cell purchased from	pof=true&sd=true
	conductor, drift	* Understand the	market.	-
	velocity, mobility and their	difference between drift	ii.To show the electrolyte	Assignment
	relation with electric current;	velocity and mobility of	used in different cells which	https://drive.google.
	Ohm's law, V-I	electrons in a conductor.	are being used in the	com/file/d/1aFtDRV
	characteristics (linear and	*State the Ohm's law and	laboratory.	bmUni6KOXI7yN1
	nonlinear), electrical energy	understand the Ohmic	Lab activities :	8MhoMBjvpukJ/vie
	and power,	conductor.	i. Measurement of	<u>w?usp=drivesdk</u>
	electrical resistivity and	Understand the concept of	unknown resistance by	
	conductivity, temperature	electric power, electrical	wheatstone bridge.	
	dependence of	resistivity		
	resistance, Internal resistance	*Know the difference		
	of a cell, potential difference	between emf and potential		
	and emf of a	difference.		
	cell, combination of cells in	* State the Kirchhoff's		
	series and in parallel,	voltage and current law.		
	Kirchhoff's rules,	*Understand principle of		
	Wheatstone bridge.	wheatstone bridge		
		*Apply the concept for		
		electrical power and		
		energy to calculate the		
		electricity bill of their home,		
		factory or office		

nucleus, n force,Mas mass defe per nucleo with mass	ion and size of	SKILL DEVELOPMENT problem solving critical thinking The students will be able to understand binding energy curve and hence interpret the reasons for nuclear fusion and fission	Activity *To plot binding energy curve and interpret it	Assignment https://docs.google. com/document/d/1Y sa5NeTdkZVOKyf Z5oJJc6fFRzY2NH nV/edit?usp=drives dk&ouid=11741485 5943371959813&rt pof=true&sd=true

July	Chapter-Magnetic effects of current Biot - Savart law and its application to the 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 uniform magnetic field; Current loop as a magnetic dipole and its magnetic dipole moment, moving coil galvanometer- its current sensitivity and conversion to ammeter and voltmeter. Chapter- Magnetism and Matter 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. Magnetic nonperties of materials- Para-	* Understand the concept of magnetic field and Oersted experiment . * State the Biot savart's law and Ampere's law and apply the Ampere's law to calculate the magnetic field due to infinitely long straight wire, *Understand the force on a moving charge in uniform magnetic and electric fields. * Understand force between two parallel current-carrying conductors-definition of ampere. Understand the torque experienced by current loop in uniform magnetic field SKILL DEVELOPMENT Communication skill Problem solving skills	Activites : *.To demonstrate the presence of magnetic field due to current carrying conductor. *To demonstrate the force experience by current carrying conductor placed in uniform magnetic field *To demonstrate the magnetic lines of force due to a bar magnet *To demonstrate the solenoid and its magnetic poles	Assignment https://drive.google.com /file/d/1h0VQUfCOrO9 FtERa9o6C1CR7BNUC gfyR/view?usp=drivesd k
	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	loop in uniform magnetic field SKILL DEVELOPMENT		

	properties.			
August	Chapter-: Electromagnetic Induction Electromagnetic induction; Faraday's laws, induced EMF and current; Lenz's Law, Self and mutual induction. Chapter: Alternating Current Alternating currents, peak and RMS value of alternating current/voltage; reactance and impedance; LCR series circuit (phasors only), resonance, power in AC circuits, power factor, wattless current. AC generator, Transformer. Chapter Electronic Devices Energy bands in conductors, semiconductors and insulators	The students will be able to *assess and analyze various situations where magnetic flux is varied and justify their answer. *recognize applications of these concepts in everyday life. They will correlate physics concepts to industrial and technological application.	Activity To demonstrate the construction and working of a generator and transformer.	Assignment https://docs.google.com/ document/d/1AeOcbOP eYjxxW_tWAwBMU8R q2AVbDO-u/edit?usp=d rivesdk&ouid=1174148 55943371959813&rtpof =true&sd=true Assignment https://docs.google.com/ document/d/1YnpgVRv EuqfJb_xdKMRW3bb4 16mcjaFu/edit?usp=driv esdk&ouid=1174148559
	 semiconductors and insulators (qualitative ideas only) Intrinsic and extrinsic semiconductors- p and n type, p-n junction Semiconductor diode - I-V characteristics in forward and reverse bias, application of junction diode -diode as a rectifier. Chapter- Electromagnetic Waves Basic idea of displacement current, Electromagnetic waves, their characteristics, their transverse nature (qualitative idea only). 	The students will be able to *Understand the energy band gaps in conductor,semiconducto r and insulator *Understand the n type and p type semiconductor *Understand the working of diode in forward and reverse biasing Student will be able to *Understand the concept of displacement	To study the characteristics of p-n junction diode.	Assignment https://docs.google.com/ document/d/1YmMAA Cc8zdTJ2EQiPuuenSW -EPeBwkzg/edit?usp=dr ivesdk&ouid=11741485 593371959813&rtpof=tr ue&sd=true

		current *understand the detection and applications of various parts of em spectrum		
Septemb er	Chapter– Wave Optics Wave optics: Wavefront and Huygens principle, 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 maxima (qualitative treatment only). Half yearly Exams	The students will be able to *understand Huygens principle * apply Huygens principle to reflection and refraction of light SKILL DEVELOPMENT problem solving critical thinking	Activities *To demonstrate interference and diffraction using lasers	Assignment https://docs.google.com/ document/d/1YBYDYv 3fX3uQGYikbkZ_oLoS MbqOo9Pg/edit?usp=dr ivesdk&ouid=11741485 5943371959813&rtpof= true&sd=true
October	Chapter- Ray Optics and Optical Instruments Ray Optics: Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and optical fibers, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of	The students will be able to *Understand the concept of reflection of light, spherical mirrors, mirror formula. * Understand the	Activities *To demonstrate total internal reflection *To study the image formation for different positions of the object	Assignment https://docs.google.com/ document/d/1YBeWCL 7CauU2N4XmBDLFSU -ZEeTdmNA6/edit?usp =drivesdk&ouid=11741 4855943371959813&rtp of=true&sd=true

a lens, combination of thin lenses in contact, refraction of light through a prism.	Refraction of light, total internal reflection. *Apply The concept of TIR in cables used in computers and transmission of Data. *apply the concept of focal length to calculate the focal length of combination of lenses.	treating candle flame as object	Assignment https://docs.google.com/ document/d/1YBYDYv 3fX3uQGYik bkZ_oLoSMbqOo9Pg/e dit?usp=drivesdk&ouid =117414855943371959 813&rtpof=true&sd=tru e
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Novemb er	Chapter-: 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. Chapter-: Atoms Alpha-particle scattering experiment;	The students will be able to Apply the concept of dual nature in day to day life SKILL DEVELOPMENT problem solving critical thinking	Activity Graphical study of photoelectric effect	Assignment https://docs.google.com/ document/d/1Ysa5NeTd kZVOKyfZ5oJJc6fFRz Y2NHnV/edit?usp=driv esdk&ouid=1174148559 43371959813&rtpof=tru e&sd=true
	Rutherford's model of atom; Bohr model of hydrogen atom, Expression for radius of nth possible orbit, velocity and energy of electron in nth orbit, hydrogen line spectra (qualitative treatment only).	The students will be able to *Bohr model of hydrogen atom *find radius of orbit, energy of electron in any orbit	PowerPoint presentation showing the Bohr model for hydrogen atom.	Assignment https://docs.google.com/ document/d/1Ysa5NeTd kZVOKyfZ5oJJc6fFRz Y2NHnV/edit?usp=driv esdk&ouid=1174148559 43371959813&rtpof=tru e&sd=true

CLASS XII POLITICAL SCIENCE (028) ACADEMIC PLAN 2025-26

Month	Topic/ Sub-Topic	Learning Objectives	Activities	Assignment
April	Book 1 Contemporary World Politics CH- End of Bipolarity Topics to be focused: a) The Soviet System b) Gorbachev and the disintegration c) Causes and Consequences of disintegration of Soviet Union d) Shock Therapy and its Consequences e) New entities in world politics Russia Balkan States Central Asian States	 Students will be able to: Identify the basic features of the Soviet System. Discuss the background and outcome of disintegration of the Soviet Union. Examine the consequences of unipolar world Assess the features of Shock Therapy Probe into the recent happenings in the Post-Communist Countries. Trace the developments between India & Russia 	 Group Discussion: Causes and consequences of disintegration of USSR Documentaries- Past & present situations in USSR/Post Soviet Republics 	Competency based questions Multiple Choice Questions Cartoon and Passage based questions Short and Long Questions Previous Year Board Exam questions
	f) India's relations with Russia	Students will be able to:		
	and other post-communist countries	 Compare and contrast the importance of European Union and ASEAN. 	 Discussion: Importance on 	
	CH- CONTEMPORARY CENTRES OF POWER Topics to be focused: a) European Union b) Association of	 Evaluate the extent of rise of Chinese economy and its impact on world politics. Summarize India's relations with China. 	regional organisations Comparative study: Economic growth of China, Japan and	

	Southeast Asian Nations c) Rise of China as an economic power d) Japan and South Korea as emerging powers		South Korea. • Use of timeline • Map activity • Interpretation of cartoons/ Pictures	
Мау	CH- CONTEMPORARY SOUTH ASIA Topics to be focused: a) Military and Democracy in Pakistan and Bangladesh b) Monarchy and Democracy in Nepal c) Ethnic Conflict and Democracy in Sri Lanka d) India-Pakistan Conflicts e) India and its Neighbours f) Peace and Cooperation	 Students will be able to: Identify & locate the seven countries of the South Asian region. Appreciate the mixed record of democracy in the South Asian region. Examine the role of Political leaders Reflect upon the causes of various conflicts and movements in this region. Justify the creation of SAARC Understand the involvement of US and China in South Asia. 	 Map activity Comparative Analysis: Political systems of South Asian countries Use of Historical data Interpretation of cartoons/Pictures /Newspaper clippings Discussion: Current economic crisis in Sri Lanka and Pakistan Quiz 	Competency based questions Multiple Choice Questions Cartoon and Passage based questions Short and Long Questions Previous Year Board Exam questions
	CH- INTERNATIONAL ORGANIZATIONS Topics to be focused: a) Meaning and importance of International Organisations b) Evolution of the UN c) Structure and function of International Organisations	 Students will be able to: Define International Organization Appreciate the role of United Nations and its agencies Reflect on the events taking place in the post-cold war era Understand the need for reforms in the United Nations 	 Discussion and debate: Necessary reforms of the UN Interpretation of cartoons /Newspaper clippings 	Competency based questions Multiple Choice Questions Cartoon and Passage based

d) Principal Organs of UN e) Reform of the UN after Cold War f) Reform of Structures, Processes and Jurisdiction of the UN g) India and the UN Reforms h) Key Agencies: IMF, World Bank, WTO, ILO, IAEA. i) NGO: Amnesty International,	 able to: Recognize the causes of security threats Enhance analytical skills to provide solutions to security concerns. Develop critical thinking about the role of various stakeholders in ensuring security today. 	 Quiz Model United Nations Discussions and debates: New sources of threat 	questions Short and Long Questions Previous Year Board Exam questions
 Human Rights Watch. j) Implications and Future of International Organizations CH - SECURITY IN CONTEMPORARY WORLD Topics to be focused: a) Meaning and Type of Security. b) Traditional concept of security c) Non-tradition notions of Security. d) New Sources of Threats e) Cooperative Security f) India's Security strategy 	 Need for Cooperative security Components of India's security strategy 	 Comparative analysis: Security concerns of different countries Interpretation of cartoons/Pictures Collaborative concept mapping: India's initiatives and policies towards security. 	Competency based questions Multiple Choice Questions Cartoon and Passage based questions Short and Long Questions Previous Year Board Exam questions

July	CH- ENVIRONMENT AND NATURAL RESOURCES Topics to be focused: a) Environmental Concerns b) Global Commons c) Common but differentiated Responsibilities d) India's Stand on Environment Issues e) Environmental Movements f) Resource Geopolitics g) Rights of Indigenous peoples	 Students will be able to: Enlist and explain the facts related to global environmental issues Recognize and understand the need to conserve critical resources Demonstrate knowledge and appreciation towards India's responsibility in protecting environment Realize the need to conserve resources and exhibit responsibility towards prudential use to facilitate sustainable development Know about the nature of concerns of indigenous communities and understand how the governments of different countries respond to their plea 	 Presentation: Environmental issues Debate and discussion: Indigenous communities of the world and their concerns Newspaper activity to inculcate concern, awareness and environmental morality 	Competency based questions Multiple Choice Questions Cartoon and Passage based questions Short and Long Questions Previous Year Board Exam questions
	CH- GLOBALISATION Topics to be focused: a) Concept of globalisation b) Causes and Consequences of globalisation c) India and globalization d) Resistance to globalization e) India and resistance to globalisation	 Students will be able to: Appreciate the significance of Globalization Elucidate the political, economic, and cultural dimensions of Globalisation. Critically evaluate the impact of globalisation on India. Draw attention to resistance movements to Globalisation and envisage its future trends. 	 Group discussion: Positive and negative impact of globalization. Interpretation of Cartoons 	Competency based questions Multiple Choice Questions Cartoon and Passage based questions Short and Long Questions

	CH- CHALLENGES TO NATION BUILDING Topics to be focused: a) Challenges for the new Nation. Three Challenges. b) Partition: Displacement and Rehabilitation. Consequences of Partition. c) Integration of Princely States. The problem Government's approach Hyderabad Manipur d) Reorganisation of States.	 Students will be able to: Analyse the challenges which Independent India faced. Describe the factors that led to the partition of India. Explain the circumstances under which different princely states signed the Instrument of Accession. Assess how language became the basis of reorganisation of the states. Evaluate the role played by leaders in Nation Building. 	 Documentaries Discussion: Causes and consequences of Partition Experiences- Meeting People who lived throughthis period. Cartoon Interpretation Map Activity 	Previous Year Board Exam questions Competency based questions Multiple Choice Questions Cartoon and Passage based questions Short and Long Questions Previous Year Board Exam questions
August	CH- ERA OF ONE PARTY DOMINANCE Topics to be focussed: a) Challenge of building democracy. b) Congress dominance in the first three general elect ions. Nature of Congress dominance Congress as social and ideological coalition. Tolerance and	 Students will be able to: Appreciate the sustenance of democratic politics in the country. Evaluate the electoral politics post-Independence Assess the dominance of the Indian National Congress from 1952 to 1967. Evaluate the role of Opposition parties 	 Group Discussion: Recent changes in the electoral process Comparative analysis: Ideology of different political parties Maps/Cartoons Question strategy Quiz 	Competency based questions Multiple Choice Questions Cartoon and Passage based questions Short and Long Questions Previous Year

c) opp pa CH PL DE To a) Idv PI PI PI b) Tr	anagement of Factions Emergence of oposition arties. H- POLITICS OF ANNED EVELOPMENT opics to be focussed: Political contestation. deas of Development. lanning lanning Commission The Early Initiatives he First Five Year Plan. apid Industrialisation.	 Students will be able to: Identify the varied option considered by the government to balance growth and socio-economic justice. Know the difference between Left and Right Ideology Understand the need for the formation of the Planning Commission. Appreciate the need for strategic long-term development programme and policies 	Debate and Discussion: First three 5-year plans. Comparative analysis: The Left and Right ideology.	Board Exam questions Competency based questions Multiple Choice Questions Cartoon and Passage based questions Short and Long Questions Previous Year Board Exam questions
RE To a) b) Aliv Ne Di Af c) Ch	H- INDIA'S EXTERNAL ELATIONS opics to be focussed: International Context The Policy of Non- ignment. ehru's role istance from two camps. fro Asian Unity Peace and conflict with hina he Chinese	 Students will be able to: Recognise the significance of NAM Interpret, compare and contrast multi-lateral aspects of Indo-China relationship Demonstrate knowledge on Indo-Pak wars Appreciate the steps taken by Indian government to develop military capacity 	 Presentation: NAM founders, objectives, principles and its relevance in contemporary world politics Group discussion: India's relations with China and Pakistan (past, 	Competency based questions Multiple Choice Questions Cartoon and Passage based questions Short and Long Questions

	Invasion1962 War and Peace with Pakistan Bangladesh War 1971 d) India's Nuclear Policy.	 Reflect and introspect on the choices that the country must consider for the cause of development and peace building 	present and future) • Debate: India's stand on shifting alliances	Previous Year Board Exam questions
September	CH- CHALLENGES TO AND RESTORATION OF THE CONGRESS SYSTEM Topics to be focused: a) Challenge of Political Succession From Nehru to Shastri 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?	 Students will be able to: Understand the challenges of political succession after Nehru. Evaluate the opposition unity and the Congress split as a challenge to Congress dominance. Compare and contrast the new Congress and the old Congress. Summarize the initiatives taken by Indira Gandhi to overcome the challenges faced by her Analyze the process of restoration of the Congress system 	 Use of timeline Comparative analysis: Political Succession Group discussion: Changing electoral performance of the congress Interpretation of cartoons Map Activity 	Competency based questions Multiple Choice Questions Cartoon and Passage based questions Short and Long Questions Previous Year Board Exam questions
October	CH- CRISIS OF DEMOCRATIC ORDER Topics to be focused: a) Background to Emergency.	 Students will be able to: Understand the causes and consequences of Emergency Examine the lessons of 	Group discussion: Based on Newspaper articles and other media information with respect to emergency	Competency based questions Multiple Choice Questions

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	Emergency • Evaluate the rule of Janata Government	 Quiz Cartoon Interpretation Map Activity 	Cartoon and Passage based questions Short and Long Questions Previous Year Board Exam questions
CH- REGIONAL ASPIRATIONS Topics to be focused: 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 Political Context Cycle of Violence Road to Peace c) The Northeast Demand for autonomy Secessionist Movements Movements against	 Students will be able to: Discuss the implications of regional demands. Analyse the importance of integrity in India. Appreciate the initiatives taken by the government in dealing with regional aspirations 	 Group discussion: Demands of Autonomy in different parts of the country. Comparative analysis: Government's response to regional aspirations Quiz. 	Competency based questions Multiple Choice Questions Cartoon and Passage based questions Short and Long Questions Previous Year Board Exam questions

	outsiders Assam and National CH- RECENT TRENDS AND DEVELOPMENT IN INDIAN POLITICS Topics to be focused a) Context of 1990s b) Era of Coalition Alliance Politics c) Political rise if 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	 Students will be able to: Understand momentous changes taking place in the nation since 1989 Trace the rise and growth of BJP. Identify the areas of growing consensus 	 Comparative analysis: Different developments taking place in present scenario with that of twentieth century. Timeline Interpretation of Cartoons/Caricatur es Quiz 	Competency based questions Multiple Choice Questions Cartoon and Passage based questions Short and Long Questions Previous Year Board Exam questions
November				
December				

HANSRAJ MODEL SCHOOL PUNJABI BAGH, NEW DELHI ACADEMIC PLAN SESSION: 2025- 2026 SUBJECT: TOURISM CLASS: XII

MONTH	TOPIC/ SUBTOPICS	LEARNING INTENTIONS	ACTIVITIES	ASSIGNMENT
April	 INTRODUCTION TO TOURISM Evaluation of Travel business Type and organizational structure of TA & TO Difference between travel agencies and tour operators Market trends & travel agency business scenario Business integration COMMUNICATION SKILLS -IV 	 Understanding the development of travel trade in India Learning about the types of travel agencies and tour operators 	Activity (includes art integration) : • To collect and study pamphlets of different Travel agencies/ Tour operators	Assignment-1 Review questions of the chapter INTRODUCTION TO TOURISM
May	OPERATIONS OF TRAVEL AGENCY Agent Origins of travel agency Operations of travel agency Organization of travel agency Commissions 	• Understanding the Principles, characteristics and range of tasks undertaken by a travel agent	Activity : • Discussion on topics related to projects	Assignment-2 Review questions of the chapter OPERATIONS OF TRAVEL AGENCY

	• Travel agencies in the 21st century SELF MANAGEMENT SKILLS -IV	• Learning about the relationship between Tourism & Transport		
July	TRANSPORT WORK• Transportation• Tourism & Transport• Air Transport• Rail Transport• Road Transport• Shipping• Mass transportation	 Understanding the definition and significance of Mass Transportation system Learning about shipping and cruise industry 	Activity (teaching moral values also) • Make a brochure of a tourist destination highlighting Itinerary and brief overview of the	Assignment-3 Review questions of the chapter TRANSPORT WORK
	ITINERARY PLANNING Itinerary planning Importance of travel itinerary Packages of inclusive tours INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS -IV 	• Understanding meaning and features of Itinerary	place.	Assignment-4 Review questions of the chapter ITINERARY PLANNING
August	TOUR PACKAGING & PROGRAMMING • Meaning and classification of tour packages • Components of tour package • Customized or tailor-made package and group inclusive tours • Tour formulation & designing process • Tour brochure designing	 Learning about the process through which package Tour may be designed Understanding types of tour packages 	Activity : • Study the map of India and highlight the prominent	Assignment-5 Review questions of the chapter TOUR PACKAGING & PROGRAMMING

	 PACKAGE TOUR COSTING Meaning of type of cost Concepts of tour costing Components of Tour cost Pricing package tour Pricing strategies Tour programming and its importance ENTREPRENEURIAL SKILLS -IV 	 Learning about about the different types of cost used in a package Tour Understanding how to price for package Tour 	tourist places of different states	Assignment-6 Review questions of the chapter PACKAGE TOUR COSTING
September October	REVISION GOVERNMENT AND PROFESSIONAL BODIES • Integration between government and professional bodies • Rules for setting up travel agency and tour operators • Department of tourism (DOT) Different schemes and policies • Professional bodies and their activities GREEN SKILLS -IV	 Understanding the different Government scheme and policy for establishing Travel Business Learning about the various national and international professional bodies 	Activity : • Make a collage Collect different types of visa forms, passport application form and other documents related to travel	Assignment-7 Review questions of the chapter GOVERNMENT AND PROFESSIONAL BODIES
November	 GLOBAL DISTRIBUTION SYSTEM Global distribution system The evolution of global distribution system 	• Defining and understanding GDS		Assignment-8 Review questions of the chapter GLOBAL DISTRIBUTION SYSTEM

HANSRAJ MODEL SCHOOL, PUNJABI BAGH, NEW DELHI. SUBJECT- WEB APPLICATION

ACADEMIC PLAN (2025-26)

CLASS XII

Duration	Theory
1 st April-15 th April	Revision of JavaScript Class XI
16 th April- 30 th April	ICT Skills-IV Web Scripting – Java Script
1 st May- 21 st May	Web Scripting – Java Script
1 st July- 15 th July	Graphic Designing using Canva and Adobe Express Web Scripting – Java Script
16 th July-31 st July	Graphic Designing using Canva and Adobe Express
1 st Aug- 30 th Aug	Graphic Designing using Canva and Adobe Express Emerging Trends
1 st Sept-30 th Sept	HALF YEARLY EXAMS
1 st Oct- 15 th Oct	Cyber Safety and Security
16 th Oct-31 st Oct	Entrepreneurial Skills-IV Green Skills-IV
1 st Nov-30 th Nov	REVISION Preboard 1 Examination
1 st Dec – 24 December	REVISION Preboard 2 Examination