

Delhi Public School Numaligarh

Syllabus Bifurcation

Session: 2023-24

Class XII: Science

Delhi Public School, Numaligarh

Class: XII

Scheme of Work: 2023-24

Sub: English

S.N	Month	No. of ID	Flamingo	Writing
1	April 2023	10	The Last Lesson Lost Spring Deep Water My Mother at Sixty Six	
	May2023	25	Keeping Quiet The Rattrap Indigo A Thing of Beauty	Notice Formal and Informal Invitations
2	June-2023	15	Poets and pancakes The Interview A Roadside Stand Aunt Jennifer's Tigers	Letter to the Editor Job Applications
3	July-2023	06	Going Places	
		24	Vistas	
5	Aug-2023	16	The Third Level The Tiger King Journey to the End of the Earth	Article Writing Report Writing
6	Sep-2023	20	The Enemy On the Face of It Memories of Childhood	
7	Oct-2023	23	Revision	
8	Nov-2023	09	Revision	
9	Dec-2023	21	Revision and ASL	
10	Jan-2024	24	Revision and ASL	
11	Feb-2024	19	Practicals and Exam	
12	March-2024	10	Exam	

Portion for Assessments-2023-24

PT-1	The Last Lesson Lost Spring Deep Water My Mother at Sixty Six Keeping Quiet	Notice Formal and Informal Invitations	Comprehension
Half Yearly Exam	The Rattrap Indigo A Thing of Beauty Poets and pancakes The Interview A Roadside Stand Aunt Jennifer's Tigers Going Places The Third Level The Tiger King Journey to the End of the Earth	Notice Formal and Informal Invitations Letter to the Editor Job Applications Article Writing Report Writing	Comprehension
Pre-Board 1	Full Syllabus		
Pre-Board 2	Full Syllabus		

Projects/Subject Enrichment Activities

Month	Activity	Objective/s	Details & Evaluation
June 2023	Project	<ul style="list-style-type: none"> • To listen to a podcast and write a report or Debate on the chosen topic 	As per CBSE guidelines
Dec-2023	Assessment of Speaking and Listening	<ul style="list-style-type: none"> • To listen to lectures and talks and to be able to extract relevant and useful information for a specific purpose • To develop the art of formal public speaking 	A Listening Skill test and a Speaking Skill test will be conducted

S.N	Month	No of ID	NCERT Physics Textbook (Part –I & II)	Practical / Activity
1	April 2023	10	Cont'd Chapter- 1: Electric Charges And Fields	Lab on (i) Ohm's Law
2	May 2023	25	Chapter- 2 :Electrostatic Potential and Capacitance. Chapter- 3 : Current Electricity. Chapter- 4 : Moving Charges and Magnetism.	Lab on (i) Meter bridge-I (ii)Meter bridge –II.
3	June2023	15	Chapter - 5: Magnetism And Matter. Chapter - 6 : Electromagnetic Induction.	Lab on (i)Galvanometer Half deflection method. (ii)Conversion of Galvanometer into Voltmeter
4	July 2023	6	Chapter - 7: Alternating Current	Lab on (i) Conversion of Galvanometer into Ammeter
5	August 2023	23	Chapter- 8:Electromagnetic waves Chapter- 9 :Ray Optics and Optical Instruments Chapter-10: Wave Optics.	Lab on (i) Glass Prism (ii) Spherical mirrors (iii) Spherical Lenses.
6	September 2023	15	Chapter -11: Dual Nature of Radiation and Matter. Chapter -12 :Atoms.	Lab on Travelling Microscope. Activities on(i)Glass slab (ii) Polaroid (iii)Identification of simple electronic components (iv)Assembling of different electrical circuit components, (v)Potentiometer bridge (vi)Lenses and Mirrors.
7	October 2023	20	Chapter -13 : Nuclei Chapter -14: Semiconductor Electronics	Lab on (i) P-N junction diode (ii) Zener diode (iii) Transistor. Investigatory Projects.
8	Nov-2023	23	Revision ,PB-I	
9	Dec-2023	9	Revision ,PB-II	
10	Jan 2024	21	Revision ,PB-III	
11	Feb-2024	24	Self Study at Home /Hostel	
12	Mar-2024	19	Board Exam	

Portion for Assessments – 2023-24

Qualifying Exam	Chapters 1 ,2,3 : Electric Charges and Fields , Electrostatic Potential and Capacitance , Current Electricity.
Half yearly	Chapters 1,2,3,4,5,6,7 : Electric Charges and Fields , Electrostatic Potential and Capacitance , Current Electricity, Moving Charges and Magnetism ,Magnetism and Matter ,Electromagnetic Induction, Alternating Current .
PB-I , PB-II & PB-III	Full Syllabus.
AISSCE -2024	Full Syllabus.

Class : XII

Syllabus break up/ Scheme of Work : 2023-24

Subject : Chemistry

S.N	Month	No of ID	Chapters	Practicals/activities
1	April 2023	10	1. Haloalkanes and haloarenes.	<ul style="list-style-type: none"> Inorganic salt analysis
2	May 2023	25	1. Haloalkanes and haloarenes(cont'd). 2. Alcohols, phenols and ethers. 3. solutions	<ul style="list-style-type: none"> Inorganic salt analysis
3	June 2023	15	1. solutions(cont'd) 2. Chemical kinetics.	Redox Titration-(1) Determine the strength of KMnO_4 by titrating against a standard solution of Mohr's salt. (2) Determine the strength of KMnO_4 by titrating against a standard solution of Oxalic acid.
4	July 2023	6	1. Chemical kinetics(cont'd)	<ul style="list-style-type: none"> Inorganic salt analysis AISSCE project work to be written(summer work)
5	August 2023	23	1. Electrochemistry. 2. Aldehydes, Ketones and carboxylic acids	Detection of functional group in an organic sample + AISSCE project work synopsis submission.
6	September 2023	15	1. Biomolecules 2. Amines	<ul style="list-style-type: none"> Detection of functional group in an organic sample. content based experiment (chemical kinetics)
7	October 2023	20	1. The d and f-block elements 2. Amines(cont'd) PB-I Exam	<ul style="list-style-type: none"> content based experiment (electrochemistry).
	November 2023	23	1. The d and f-block elements(cont'd). 2. Coordination compounds.	<ul style="list-style-type: none"> Preparation of organic/inorganic crystals. AISSCE project work to be done.
9	December 2023	9	Revision + PB-II exam	---
10	January 2024	21	Revision+ PB-III exam	--
11	February 2024	24	Self study	AISSCE practical exam
12	March 2024	19	AISSCE 2024	

Total- 210

Portion for Assessments :2023-24

Examinations	Chapters for Assessments
PT-1/QE-1	<ol style="list-style-type: none">1. Haloalkanes and haloarenes2. Alcohols,phenols and ethers.3. Solutions
Half yearly	<ol style="list-style-type: none">1. Solutions2. Electrochemistry3. Chemical kinetics4. Biomolecules5. Haloalkanes and haloarenes.6. Alcohols,phenols and ethers.7. Aldehydes, ketones and carboxylic acids.8. Amines.
PB-I &PB-II	Full syllabus(all 10 chapters)
AISSCE 2024	Full syllabus(all 10 chapters)

Delhi Public School, Numaligarh

Class: XII (Science)

Scheme of Work: 2023-24

Subject: Biology (044)

S.N	Month	No of ID	Chapters	Practical /activities
1	April 2022	10	Chapter-2: Sexual Reproduction in flowering plants.	<ul style="list-style-type: none"> DNA isolation from given samples and Spotting
2	May 2022	25	Chapter-3: Human Reproduction. Chapter-4: Reproductive Health. Chapter-5 : Principles of Inheritance and variation .	<ul style="list-style-type: none"> Preparing a temporary mount of pollen germination and Spotting.
3	June2022	15	Chapter-5 Cont'd : Principles of Inheritance and variation Variation. Chapter-6: Molecular Basis Of Inheritance.	<ul style="list-style-type: none"> Spotting
4	July 2022	6	Chapter-6 Cont'd : Molecular Basis Of Inheritance.	<ul style="list-style-type: none"> Spotting
5	August 2022	23	Chapter-7: Evolution. Chapter-8: Human Health and Disease.	<ul style="list-style-type: none"> Study of Plant population density through quadrat method.
6	September 2022	15	Chapter-10: Microbes in Human Welfare. Chapter-11: Biotechnology: Principles and Processes.	<ul style="list-style-type: none"> Study of plant population frequency by quadrat method and Spotting.
7	October 2022	20	Chapter-11 Cont'd : Biotechnology: Principles and Processes. Chapter-12: Biotechnology and its Application.	<ul style="list-style-type: none"> Prepare temporary mount of onion root tip to study mitosis.
8	November 2022	23	Chapter-13: Organisms and Population. Chapter-14: Ecosystem.	<ul style="list-style-type: none"> Spotting.
9	December 2022	9	Chapter-15: Biodiversity and Conservation. Pre Board-1+ Revision	
10	January 2023	21	Pre Board -2 +Revision.	
11	February 2023	24	Preparatory leave and AISSCE-2024	
12	March 2023	19		

Portion for Assessments – 2023-24

PT-1	Chapter-2: Sexual Reproduction in flowering plants Chapter-3: Human Reproduction Chapter-4: Reproductive Health Chapter-5: Principles of Inheritance and Variation .
Pre Board-1	Chapter-1: Reproduction in organisms Chapter-2: Sexual Reproduction in flowering plants Chapter-3: Human Reproduction Chapter-4: Reproductive Health Chapter-5: Principals of Inheritance and variation Chapter-6: Molecular Basis Of Inheritance Chapter-7: Evolution Chapter-8: Human Health and Disease Chapter-9: Strategies for Enhancement In Food Production Chapter-10: Microbes in Human Welfare Chapter-11: Biotechnology: Principles and Processes Chapter-12: Biotechnology and its Application
Pre Board -2	Full Syllabus.
AISSCE-24	Full Syllabus.

Projects/Subject Enrichment Activities

Month	Activity	Objective	Details/Evaluation
May-2023	Practical and Record work on	Enable students to understand to perform experiments based on theory	As per CBSE syllabus Practical Record keeping
August-2023	Practical and Record work on	Enable students to understand to perform experiments based on theory	As per CBSE syllabus Practical Record keeping
September 2023	Practical and Record work Final Investigatory Project based on research and review of literature.	Enable students to understand by way of field visit Enable students to understand byway of experiential learning in investigatory approach	As per CBSE syllabus Practical Record keeping and investigatory report preparation
October 2023	Field Study to educational institutions/sites.	Enable students to get idea on practical experiences, advanced learning and scopes of higher studies.	

S.N	Month	No. of ID	Computer Science with python-Sumita Arora
1	Apr-2023	10	Unit 1- Computational Thinking and Programming-2 Section-1: Revision of the basics of Python covered in Class XI.
1	May-2023	25	Unit 1- Computational Thinking and Programming-2 Section-2: Functions Section-3: Exception Handling
2	June/July:2023	20	Unit 1- Computational Thinking and programming-2 Section-3 : File handling
3	Aug-2023	25	Unit 1- Computational Thinking and programming-2 Section-4: Data-structures-Stack
4	Sep-2023	17	Unit 2-Computer Networks Section-1: Evolution of Networking Section-2 : Data Communication terminologies Section-3 : Transmission media Section-4 : Network devices Section-5 : Network Topologies and types Section-6 : Network Protocol Section-7 : Mobile Telecommunication Technologies Section-8 : Introduction To Web services
5	Oct-2023	22	Unit-3 Database Management Section-1: Database Concepts Section-2: Relational data model Section-3: Structured Query Language Section-4: Interface of Python with an SQL database
6	Nov-2023	25	Revision
7	Dec-2023		Revision

Portion for Assessments-2023-24

PT-1	Unit 1- Computational Thinking and Programming Section-1 and Section-2
Half Yearly Exam	Unit 1- computational Thinking and Programming Section-1 to Section-4
PB-1	Unit-1 and Unit-2
PB-2	Complete Syllabus

Projects/Subject Enrichment Activities

Month	Activity	Objective/s	Details & Evaluation
July-Aug:2023	Practical and Record work on	Enable students to understand the requirement functions	Logic, documentation/indentation, Code quality and output presentation:
Aug-2023	Practical and Record work on	Enable students to understand the way of dealing with file handling	Logic, documentation/indentation, Code quality and output presentation:
Sep-Oct:2023	Practical and Record work Final Project on Python and SQL	Enable students to understand the recursion, data structures , enable students to develop software, used in real life using Python and SQL	Logic, documentation/indentation, Code quality and output presentation:

Sl.no	Month	No of l. Days	Introductory Macroeconomics	Indian Economic Development
01	April	10	Unit1: National Income & Related Aggregates	
02	May	25	Unit 1: National income & Related Aggregates	Unit 6: Development Experience (1947-90) and Economic reforms since 1991.
03	June	15	Unit 2: Money and Banking	Unit 6: Economic reforms since 1991, Demonetization & GST
04	July	6	Unit 3: Problem of Excess demand and Deficient demand	
05	August	24	Unit 3: Problem of Excess demand and Deficient demand	Unit 7: Rural Development, Human Capital Formation, Employment
06	September	16	Unit 4: Government Budget and Economy	Unit 7: sustainable development
07	October	20	Unit 4: Government Budget and Economy	Unit 7: sustainable development
08	November	23	Unit 5: Balance of Payment	Unit 8: Developmental Experience
09	December	9	Revision	Revision
SUBJECT MAGAZINE FOR HALF YEARLY FOR EVALUATION OF 20 MARKS, SUBMISSION:28/7/23 (Internal assessment)/ presentation				
PROJECT AS PER CBSE GUIDELINES , SUBMISSION ON 28/7/2023 (CBSE, Project viva), Mock Viva will be conducted / Presentation				
PORTION FOR ASSESSMENT				
09	June	19/6/23 – 23/6/23	PT- 1 (Unit 1: National income & Related Aggregates)	PT -1(Unit 6: Development Experience (1947-90) and Economic reforms since 1991.)
10	October	19/10/23 – 01/11/23	PB-1	PB - 1
11	December	13/12/23 – 12/01/24	PB II = All syllabus	PB II = All syllabus

CRITERIA FOR PROJECT WORK/ SUBJECT MAGAZINE

Month	Activity	Objective	Details & Evaluation	Submission
April /May	Choose Topic Collection of data/material	<ul style="list-style-type: none"> ➤ Probe deeper into theoretical concepts learnt in classes. ➤ Demonstrate the learning of economic theory ➤ Follow up aspects of economics in which learners have interest. 	<ul style="list-style-type: none"> ➤ Relevance of the topic - 3 	
June	Organisation of data/material Presentation of data/material		<ul style="list-style-type: none"> ➤ Research work-6 	
August-	Analysing the material/data for conclusion		<ul style="list-style-type: none"> ➤ Presentation-3 	Magazine (Class –XI & XII). Both have to submit
October	Draw conclusion		<ul style="list-style-type: none"> ➤ Viva-voce-8 	
December	Presentation of the project			
July/ October/November	Project Submission	For Half Yearly- Date mention	For Annual /CBSE	Project (Class – XI & XII). Both have to Submit.

Class: XII Hum

Scheme of Work: 2023-24

Sub: Geography

S.N	Month	No. of ID	Fundamentals of Human Geography	India: People and Economy	Practical work
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1	April - 2023	10	Human Geography Nature and Scope (L 1)		Data—Its source and compilation
2	May-2023	25	The World Population (L 2) Human Development (L 4)	Population: Distribution, Density, Growth and Composition (L 1) Human settlement (4)	Data Processing-mean, median mode
3	June-2023	15	Primary Activities (L 5)	Land Resources and Agriculture (L 5) Mineral and Energy Resources (L 7) (Holiday Homework)	Construction of diagrams: Line graphs, Bar graphs ,Pie diagram,
4	July-2023	06		Water Resources (L 6)	
5	Aug-2023	24	Secondary Activities (L 6) Tertiary Activities and Quaternary Activities (L 7)	Planning and Sustainable Development in India (L 9) Transport and communication(L 10)	Construction of diagrams: Wind Rose Star diagram, Flow chart
6	Sep-2023	16	Transport and Communication (L 8)	International Trade (L 11)	Classification on the basis of construction Dot maps, Choropleth Maps, Isopleths Maps
7	Oct-2023	20	International Trade (L 9)	Geographical perspective on selective issues and problems (L 12)	Spatial Information Technology
8	Nov-2023	23	Revision	Revision	
9	Dec-2023	09	Revision &Pre Board 1		
10	Jan-2024	21	Pre Board 2		Board Practical examination
11	Feb-2024	24			
12	Mar- 2024	19	Board Examination		

Portion for Assessments-2023-224

PT-1	Half Yearly Exam	PT-2	Pre-Board Exams
B 1-Lesson-1, 2 B 2- Lesson1	1. Fundamentals of Human Geography: Unit 1,2 2. India: People and Economy:Unit 1,2,3 (Except Minerals)	BOOK 1 Transport and Communication (L 8)	Complete Syllabus

S. No.	Month	No. Of ID	Health and physical education	Practical
1	April 2023 May 2023	10 25	<p>Management of sporting events</p> <ul style="list-style-type: none"> • Functions of sports management events (planning, organizing, staffing directing and controlling) • Various committees and their responsibilities (pre, during and post) • Fixtures and procedures- Knock out (bye and seeding), League (staircase and cyclic) 	
2	June 2023 July 2023	15 06	<p>Children and women in sports</p> <ul style="list-style-type: none"> • Common postural deformities- Knock knee, Bow legs, Flat Foot, Round Shoulders, Lordosis, Kyphosis, Scoliosis and their corrective measures • Special consideration (Menarche and Menstrual dysfunction) • Female athletes triad (Osteoporosis, Amenorrhea, eating disorders) 	PEF Test
3	August 2023	24	<p>Yoga as preventive measures for lifestyle disease</p> <ul style="list-style-type: none"> • Obesity- Procedure, benefits and contraindication for tadasana, katichakrasana, pawanmuktasana, matsyasana, halasana, paschimottanasana, ardh-matsyendrasana, dhanurasana, ushtrasana, suryabhedan pranayam • Diabetes- Procedure, benefits and contraindication for Katichakrasana, pawanmuktasana, bhujangasana, shalabhasana, dhanurasana, sputa-vajrasana, paschimottanasana, ardh-matsyendrasana, mandukasana, gomukhasana, yogmudra, ushtrasana, kapalbhati • Asthama- Procedure, benefits and contraindication for tadasana, urdhawahastottanasana, uttanmandukasana, bhujangasana, dhanurasana, ushtrasana, vakrasana, kapalbhati, gomukhasana, matsyasana, anulom-vilom • Hypertension- Procedure, benefits and contraindication for tadasana, katichakrasana, uttanpadasana, ardh-halasan, sarala matsyasana, gomukhasana, uttanmandukasana, vakrasana, bhujangasana, makrasana, shavasana, nadishoddhan pranayam, sheetli pranayam 	HISTORY OF MAIN GAME
4	August 2023	24	<p>Physical Education and sports for CWSN</p> <ul style="list-style-type: none"> • Organizations promoting disability sports (Special Olympics, Paralympics, Deaflympics) • Advantages of physical activities for children with special needs • Strategies to make physical activities accessible for CWSN 	BASIC SKILLS
5	September 2023	16	<p>Sports and nutrition</p> <ul style="list-style-type: none"> • Concept of balanced diet and nutrition • Macro and micro nutrients- food sources and functions Nutritive and non nutritive components of diet 	PHYSICAL FITNESS

6	October 2023	20	<p>Test and measurements in sports</p> <ul style="list-style-type: none"> • Fitness test- SAI khelo India fitness test in school: • Age group 5-8 years (Class I to III)- BMI, Flamingo balance test, plate tapping test, • Age group 9-18 years (Class IV to XII)- BMI, 50m speed test, 600m run/walk, sit and reach test, strength test (abdominal partial curl up), push up for boys, modified push up for girls • Computing basal metabolic rate • Rikili and Jones senior citizen fitness test 	BMI OF 10 MEMBERS WITH GRAPHICAL REPRESENTATION
7	October 2023	20	<p>Physical education and sports for cwsn-divyang</p> <ul style="list-style-type: none"> • Physiological factors determining components of physical fitness • Effects of exercise on muscular system • Effect of exercise on cardio-vascular system • Sports injuries: classification (Soft tissue injuries- abrasion, contusion, laceration, incision, sprain and strain, Bone and joint injuries- Dislocation, fractures- greenstick, comminuted, transverse, oblique and impacted) 	
8	November 2023	23	<p>Bio-mechanics and sports</p> <ul style="list-style-type: none"> • Newton's law of motion and its application in sports • Equilibrium- dynamic and static and centre of gravity and its application in sports • Friction and sports • Projectile in sports 	
9	November 2023	23	<p>Psychology and sports</p> <ul style="list-style-type: none"> • Personality; it's definition and types (sheldon and jung classification) & big five theory • Meaning, concept and type of aggression in sports • Psychological attributes in sports- self esteem, mental imagery, self talk, goal setting 	
10	November 2023	25	<p>Training in sports</p> <ul style="list-style-type: none"> • Concept of talent identification and talent development in sports • Introduction of sports training cycle- Micro. Meso and Macro cycle • Strength- definition, types and methods of improving strength- isometric, isotonic and iso kinetic • Endurance- definition, types and methods to develop endurance- continuous training method, interval training method and fartlek training method • Speed- definitions, types and methods to develop speed- acceleration run and pace run • Flexibility- definitions, types and methods to develop flexibility • Coordinative ability- definitions and types • Circuit training- introduction and its importance 	
11	Dec-2023	9	Revision	

Portion for Assessments- 2023-24 for Class-XII

Assessment	Chapters	Practical
PT-1	Unit-1: Management of sporting events Unit-2: Yoga as preventive measures for lifestyle disease	
Half Yearly Exam	Unit-1: Management of sporting events Unit-2: Management of sporting events Unit-3: Physical Education and sports for CWSN Unit-4: Sports and nutrition Unit-5: Test and measurements in sports	Physical Efficiency Test With Project File
PT-2	Unit Test-6: Physical education and sports for cwsn-divyang Unit Test-7: Bio-mechanics and sports	
PB-1	Unit-1: Management of sporting events Unit-2: Management of sporting events Unit-3: Physical Education and sports for CWSN Unit-4: Sports and nutrition Unit-5: Test and measurements in sports Unit-6: Physical education and sports for cwsn-divyang Unit-7: Bio-mechanics and sports Unit-8: Physiology and injuries in sports Unit-9: Psychology and Sports Unit-10: Training in sports	Physical Efficiency Test With Project File
PB-2	Unit-1: Management of sporting events Unit-2: Management of sporting events Unit-3: Physical Education and sports for CWSN Unit-4: Sports and nutrition Unit-5: Test and measurements in sports Unit-6: Physical education and sports for cwsn-divyang Unit-7: Bio-mechanics and sports Unit-8: Physiology and injuries in sports Unit-9: Psychology and Sports Unit-10: Training in sports	Physical Efficiency Test With Project File

Sl.No.	MONTH	No. of ID	TOPICS/UNITS to be covered
1.	April-2023	10	<p>MATRICES: Introduction, Matrix, Types of Matrices, Operations on Matrices, Addition and multiplication of Matrices, Multiplication with a scalar, Simple properties of Addition, Multiplication and Scalar multiplication of Matrices, Transpose of a Matrix, Symmetric and Skew Symmetric Matrices, Invertible Matrices ,Proof of uniqueness of inverse , if it exists</p>
2.	May-2023	25	<p>DETERMINANTS: Determinant of a square matrix (up to 3 x 3 matrices), minors, co-factors and applications of determinants in finding the area of a triangle, Adjoint and inverse of a square matrix. Consistency, inconsistency and number of solutions of system of linear equations by examples, solving system of linear equations in two or three variables (having unique solution) using inverse of a matrix</p>
			<p>RELATIONS AND FUNCTIONS: Types of relations: reflexive, symmetric, transitive and equivalence relations. One to one and onto functions</p>
			<p>INVERSE TRIGONOMETRIC FUNCTIONS: Definition, range, domain, principal value branch, Graphs of inverse trigonometric functions</p>
3.	June-2023	15	<p>CONTINUITY AND DIFFERENTIABILITY : Continuity and differentiability, chain rule, derivative of inverse trigonometric functions, <i>like</i> $\sin^{-1}x$, $\cos^{-1} x$ and $\tan^{-1} x$, derivative of implicit functions. Concept of exponential and logarithmic functions. Derivatives of logarithmic and exponential functions. Logarithmic differentiation, derivative of functions expressed in parametric forms. Second order derivatives.</p>
			<p>Revision for Qualifying Exam</p>
4.	July -2023	6	<p>APPLICATION OF DERIVATIVES: Applications of derivatives: rate of change of bodies, increasing/decreasing functions, maxima and minima (first derivative test motivated geometrically and second derivative test given as a provable tool) Simple problems (that illustrate basic principles and understanding of the subject as well as real life situations).</p>
5.	August - 2023	25	<p>INTEGRALS: Integration as inverse process of differentiation. Integration of a variety of functions by substitution, by partial fractions and by parts, Evaluation of simple integrals of the following types and problems based on them.</p> $\int \frac{dx}{x^2 \pm a^2}, \int \frac{dx}{\sqrt{x^2 \pm a^2}},$ $\int \frac{dx}{\sqrt{a^2 - x^2}}, \int \frac{dx}{ax^2 + bx + c},$ $\int \frac{dx}{\sqrt{ax^2 + bx + c}}, \int \frac{px + q}{\sqrt{ax^2 + bx + c}} dx,$

Sl.No.	MONTH	No. of ID	TOPICS/UNITS to be covered
			$\int \frac{px+q}{ax^2+bx+c} dx, \int \sqrt{a^2 \pm x^2}, \int \sqrt{x^2 - a^2} dx, \int \sqrt{ax^2 + bx + c} dx$ Fundamental Theorem of Calculus (without proof). Basic properties of definite integrals and evaluation of definite integrals APPLICATION OF INTEGRALS: Applications in finding the area under simple curves, especially lines, circles/ parabolas/ellipses (in standard form only) DIFFERENTIAL EQUATION: Definition, order and degree, general and particular solutions of a differential equation. Solution of differential equations by method of separation of variables, solutions of homogeneous differential equations of first order and first degree. Solutions of linear differential equation of the type: $\frac{dy}{dx} + py = q$, where p and q are functions of x or constants. $\frac{dx}{dy} + px = q$, where p and q are functions of y or constants
6.	September-2023	23	VECTOR ALGEBRA: Vectors and scalars, magnitude and direction of a vector. Direction cosines and direction ratios of a vector, Types of vectors (equal, unit, zero, parallel and collinear vectors), position vector of a point, negative of a vector, components of a vector, addition of vectors, multiplication of a vector by a scalar, position vector of a point dividing a line segment in a given ratio, Definition, Geometrical Interpretation, properties and application of scalar (dot) product of vectors, vector (cross) product of vectors. THREE DIMENSIONAL GEOMETRY: Direction cosines and direction ratios of a line joining two points. Cartesian equation and vector equation of a line, skew lines, shortest distance between two lines, Angle between two lines. LINEAR PROGRAMMING: Introduction, related terminology such as constraints, objective function, optimization, graphical method of solution for problems in two variables, feasible and infeasible regions (bounded or unbounded), feasible and infeasible solutions, optimal feasible solutions (up to three non-trivial constraints).
7.	October-2023	15	PROBABILITY: Conditional probability, multiplication theorem on probability, independent events, total probability, Bayes' theorem, Random variable and its probability distribution, mean of random variable Revision for Pre board Exam-1 PRE BOARDEXAM-I
8.	Nov- 2023	22	Revision for Preboard-II & Doubt clearing classes

Sl.No.	MONTH	No. of ID	TOPICS/UNITS to be covered
9.	Dec 2023	14	Revision: Revision for Preboard-II PRE BOARDEXAM-I
10.	Jan 2024	21	PRE BOARDEXAM-II Doubt clearing classes & Remedial classes Board Practical Exam
11.	Feb 2024	23	Revision Doubt clearing classes & Remedial classe

Portion for Assessment-2023-'24

Exam	Qualifying	Chapter1:Relations and Functions Chapter3:Matrices	Chapter4:Determinants Chapter5:Continuity and Differentiability
Preboard-1		Chapter1:Relations and Functions Chapter2:Inverse trigonometric Functions Chapter3:Matrices Chapter4:Determinants Chapter5:Continuity and Differentiability Chapter6:Application of Derivatives	Chapter7:Integrals Chapter8:Application of Integrals Chapter9:Differential Equation Chapter10:Vector Algebra Chapter:11Three Dimensional Geometry Chapter:12Linear Programming Problem
Preboard-2		Full Syllabus	

Activities to be performed during the year:

1. To verify that the relation R in the set L of all lines in a plane, defined by $R = \{(l, m) : l \text{ is perpendicular to } m\}$ is symmetric but nether reflexive nor transitive.
 2. To draw the graph of $\sin^{-1} x$, using the graph of $\sin x$ and demonstrate the concept of mirror reflection (about the line $y=x$).
 3. To find analytically the limit of a function $f(x)$ at $x=c$ and also to check the continuity of the function at that point.
 4. To verify Equivalence Relation.
 5. To demonstrate a function which is not one-one but it is onto.
 6. To construct an open box of maximum volume from a given rectangular sheet by cutting equal squares from each corner.
 7. To verify that amongst all the rectangles of the same perimeter the square has the maximum area.
 8. To verify geometrically that $\vec{c} \times (\vec{a} + \vec{b}) = \vec{c} \times \vec{a} + \vec{c} \times \vec{b}$
 9. To verify that the angle in a semicircle is a right angle, using vector method.
 10. To explain the computation of conditional probability of a given event A, when event B has already occurred through an example of throwing a pair of dice.
- The activities performed by the student throughout the year and record keeping:5 marks
 - Assessment of the activity performed during the year end test:3 marks
 - Viva voce:2 marks

Class: XI

Scheme of Work: 2023-24

Sub: PSYCHOLOGY

S.N	Month	No. of ID	Unit to be Covered	PRACTICAL
1	May 2023	25	<ul style="list-style-type: none">What is Psychology?	
2	June 2023	15	<ul style="list-style-type: none">What is Psychology?Methods of Psychological Enquiry	
3	July 2023	06	<ul style="list-style-type: none">Methods of Psychological Enquiry	Project on Methods of Enquiry
4	August 2023	24	<ul style="list-style-type: none">LearningHuman Memory	Serial and Free Recall
5	Sept 2023	16	<ul style="list-style-type: none">Human Memory	
6	October 2023	20	<ul style="list-style-type: none">Sensory, Attention and Perceptual Processes	
7	Nov 2023	23	<ul style="list-style-type: none">Basis of human BehaviourHuman Development	
8	December 2023	09	<ul style="list-style-type: none">Human Development	
9	January 2024	21	<ul style="list-style-type: none">Motivation and Emotions	Scat
10	Feb 2024	24	<ul style="list-style-type: none">ThinkingRevision	
11	March 2024	19	<ul style="list-style-type: none">Revision	

Portion for Assessments-2023-24 (PSYCHOLOGY CLASS XI)

PT-1 June 2023	<ul style="list-style-type: none">What is Psychology?Method of Psychological Enquiry	
Half Yearly Exam Sep 2023	<ul style="list-style-type: none">What is Psychology?Methods of Psychological EnquiryHuman MemoryLearning	Serial and Free Recall
Pt-2 Dec 2023	<ul style="list-style-type: none">Human DevelopmentSensory ,Attention and Perceptual ProcessesBasis of human Behaviour	
ANNUAL EXAM March 2024	Full Syllabus	2 PRACTICALS

Projects/Subject Enrichment Activities

Month	Activity	Objective/s	Details & Evaluation
August	Report writing The students will conduct a project on methods of Enquiry	The students will have a first hand knowledge about the methods of enquiry	<ul style="list-style-type: none"> ● Correct information (content) ● Presentation (written in clear manner)
Sep	Ppt on Hunam Memory	Better understanding of the concept of SM,STM and LTM	<ul style="list-style-type: none"> ● Correct information ● Presentation ● Body Language.
Dec-Jan	Model of Sensory Processes	The students will have a first hand knowledge and understanding of the different sensory processes	<ul style="list-style-type: none"> ● Presentation ● Correct model

S.N	Month	No. of ID	NCERT Home Science Text book (Part I & Part II)	Practical
1.	April- 2023	10	Unit I- Work, Livelihood and Career Chapter 1: Work ,Livelihood and Career <ul style="list-style-type: none"> • Introduction • Traditional occupation in India • Work, age Gender 	Activity 3- Visit to local artisans, Students will prepare resource file on the local traditional art, craft and cuisins. Activity-4- Collect information on women in your region who have contributed significantly to society
	May- 2023	25	<ul style="list-style-type: none"> • Life skills for livelihood • Ergonomics • Entrepreneurship Unit 2- Nutrition, Food Science and Technology Chapter 2- Clinical Nutrition and Dietetics	Activity 5- Prepare a power point presentation of distinguished women in Science, Technology, Mathematics, sports,Education,Literature,Medicine and other important areas.
2.	June-2023	15	Unit 2- Nutrition, Food Science and Technology Chapter 3-Public Nutrition and Health Chapter 5 – Food Processing and Technology	1. Modification of normal diet to soft diet for elderly person. 2. Development and preparation of supplementary foods for nutrition programme. 3. Planning a menu for a school canteen or mid-day meal in school for a week. 4. Design, prepare and evaluate a processed food product.
3.	July 23	06	Chapter 6- Food Quality and Food Safety	5. Qualitative test for food adulteration in: pure ghee, tea leaves, whole black pepper, turmeric powder, milk, asafoetida.
3.	August-2023	23	Unit III-Human Development and Family Studies. Chapter 7- Early Childhood Care and Education. Chapter 10- Management of Support Services ,Institutions and programmes for Children, youth and Elderly	6. Preparation and use of any one teaching aid to communicate socially relevant messages for children/ adolescents /adults in the community. OR Preparation of any one toy for children (age appropriate) using locally available and indigenous material
4.	September-2022	15	Unit 4- Fabric And Apparel Chapter 11: Design for Fabric and Apparel Chapter 12: Fashion Design and Merchandising Ch- 15: Care and Maintenance of Fabrics in Institutions	7. Preparation of any one article using applied textile design techniques; tie and dye/batik/block printing. 8. Remove different types of stains from white cotton cloth –Ball pen, curry, grease, ink, lipstick, tea and coffee.
5.	October-2022	20	Unit V-Resource Management Chapter 17: Hospitality Management Chapter 20: Consumer Education and Protection	10. Evaluate any one advertisement for any job position. 11. Develop a leaflet/pamphlet for Consumer Education and Protection on any one of the following

			UNIT VI – Communication and Extension Ch-21- Development Communication and Journalism	a) Consumer Protection Act (CPA) b) Consumer responsibilities c) Consumer organization d) Consumer Problem
6.	Nov 2022	23	Revision, PB-I	
7.	Dec-2022	09	Revision, PB-II	
8.	Jan-2023	21	Revision, PB-III	
9.	Feb-2023	24	Self study at home/hostel	
10.	March-2023	19	Board Exam	

Portion for Assessments-2023 - 2024

PT-1	Unit I- Work, Livelihood and Career Chapter 1: Work ,Livelihood and Career Unit 2- Nutrition, Food Science and Technology Chapter 2- Clinical Nutrition and Dietetics. Chapter 3- Public Nutrition and Health
Half Yearly Exam	Unit I- Work, Livelihood and Career Chapter 1: Work ,Livelihood and Career Unit 2- Nutrition, Food Science and Technology Chapter 2- Clinical Nutrition and Dietetics Chapter 3- Public Nutrition and Health Chapter 5 – Food Processing and Technology Chapter 6- Food Quality and Food Safety Unit III-Human Development and Family Studies. Chapter 7- Early Childhood Care and Education. Chapter 10- Management of Support Services ,Institutions and programmes for Children, youth and Elderly
PB-1	Full Syllabus
PB-2	Full Syllabus
AISSCE 2023 -2024	Full Syllabus

Project

Any one of the following project may be undertaken and evaluated –

1. Study of an integrated community based, nutrition/health programme being implemented in own area , with reference to –
 - a) Programme objectives
 - b) Focal group/ Beneficiaries
 - c) Modalities of implementation
2. Visit to the neighbouring areas and interview two adolescents and two adults regarding their perception of persons with special needs.
3. Profile any two person (child/adult) with special needs to find out their diet, clothing , activities, physical and psychological needs.
4. Planning any five messages for nutrition, health and life skills using different modes of communication for different focal groups.
5. Market survey any five processed foods with their packaging and label information

SL no	Month	No. of Days	History of Indian art by Devender Kumari
1	April-2023	09	Unit-1 (a) Rajasthani School of Miniature Painting. Section – 1: Origin and development Section - 2: Main features.. Section – 3: Study of the Paintings
2	May-2023	25	Section – 3: Study of Rajasthani miniature Paintings (continue)
3	June-2023	20	(b) Pahari School of miniature Paintings. Section – 1: Origin and development Section – 2: Main features... Section - 3: Study of the paintings.
4	July-2023	06	Unit-2 (a) Mughal School of miniature Painting. Section – 1: Origin and development Section – 2: Main features.....
5	Aug-2023	23	Section-3: Study of Mughal Paintings
6	Sept-2023	15	(b) The Deccan school Contribution of Indian artist in the struggle for National Freedom Movement Indian National Flag & the Symbolic significance of its forms and the colours
7	Oct-2023	19	Unit-3 (a) The Bengal School of Painting and the Modern trends in Indian Art (About the beginning to mid of the 20th Century) (i) National Flag of India and the Symbolic significance of its forms and the colour 8(ii) Introduction of Bengal school of painting. 9Origin and development Main Features...
8	Nov-2023	22	(iii) Study of the Bengal School of Paintings..
9	Dec-2023	15	(b) Introduction of modern trends in Indian art (i) Study of Modern painting
10	Jan-2024	21	(ii) Study of the Graphic Prints
11	Feb-2024	23	(iii) Study of the Sculptures
12	Mar-2024	19	Revision

Portion for Assessments-2023-24

PT-1	Rajashani miniature painting and Pahari school of miniature painting.	Origin and development, Main features, Study of the Paintings, Sub-Schools.
Half Yearly Exam	Rajasthani school of miniature Painting Pahari school of miniature painting Mughal school of miniature painting and Deccan school of miniature Painting	Origin and development, Main features, Study of the Paintings.
PT-2	Indian national Flag, Bengal school of painting and modern trends of Indian art.	Origin and development, Main features, Study of the Paintings, evolution of National Flag, significance of its forms and the colours.
Annual Exam	Rajasthani school of miniature painting Pahari school of miniature Painting Mughal school of miniature painting and Deccan school of miniature Painting Indian national Flag, Bengal school of painting and modern trends of Indian art. Deccan school miniature Painting Indian National flag & Bengal school of Art	Origin and development, Main features, Study of the Paintings, evolution of National Flag, significance of its forms and the colours, study of the work of Contemporary Modern Indian art.

Projects/Subject Enrichment Activities

Month	Activity	Objectives	Details & Evaluation
April to Aug -2023	Nature and object study (Completion By 31st Aug)	Exercises in pencil with light & shade and in colour from fixed point of view	Drawing-15 Treatment of colours-05 Overall impression-05
September to December-2023	Painting Composition (Completion By 30st Nov)	Imaginative Painting based on subjects from life & nature in water colour and poster colour.	Compositional arrangement-15 Treatment of colour-05 Originality, Creativity-05
January-2024	Portfolio Assessment (Submission by 9th Dec 2024)	Record of the entire Years performance from sketch to finished product.	Record of the entire year-10 Nature and object study-05 Painting composition-05
Feb-2024	Revision		Total marks(Practical)-70