



# SYLLABUS FOR SESSION 2024-25

## CLASS – XI

### Subject : English

SL. NO.	DURATION	NTP	CHAPTER/TOPIC	SYLLABUS COVERED	PEDAGOGY	ART INTEGRATED/ LEARNING ACTIVITIES
1	APRIL		The Portrait of a Lady	1. Character Analysis 2. Discussion author's relationship with his grandmother. 3. Changing phases of human relationship	1. Interactive-Group Discussion 2. Presentation 3. Creative & Critical Thinking	1. Research work on Author-Khushwant Singh 2. Group Discussion on Growing Distance Between Young and Older Generation. Write A Creative paragraph on your Grandmother Paste photos
			Poster Making	1. Types, Categories and format of various different posters. 2. Samples and Format will be shared	1. Presentation on formats 2. Discussion on Pre requisite knowledge of School Notices 3. White Board Presentation/News cuttings.etc.	1. Handout-Practice questions on various different categories of posters.
			A Photograph	1. Title Relevance. 2. Transient Human Life.	1. Types of Poetry 2. Rules Of Recitation. 3. Figurative Language. 4. Visual Presentation	1. Worksheets will be given on figure of speech used in the poetry. 2. Write Self Composed Poetry on any topic.
2	MAY		The Summer of a Beautiful White Horse	1. Character Analysis 2. Discussion author's relationship with his cousin Mourad. 3. The Inner Voice 4. Trades of Armenian Tribe	1. Interactive-Group Discussion 2. Presentation 3. Creative & Critical Thinking 4. Relevant Pictures/Videos	1. Research work on Armenian Tribe & William Saroyan. 2. Pen portrait of major characters with sketches.
			Speech Writing	1. Format & Presentation 2. Famous Speaker and their Speeches. 3. Marking Scheme	1. Learning - Format & sample 2. Method of writing and its relevance. 3. Activity oriented.	1. Student Presentation - Students will deliver a speech on the topic of their choice.
	MAY		We are not afraid to die...	1. Journey of Cap. James Cook 2. Duplicated the Voyage. 3. Author's Family Description. 4. Problems Faced. 5. Overcoming Barriers. 6. Perceptions - Adult Vs. Children.	1. Build Interest - On any journey where they faced Danger. 2. Parts of Boats - will be shown to understand the chapter. 3. Life Skills - Planning, Determination, will power & hard work.	1. Prepare a digital timeline of the lesson to learn the facts. 2. Draw a boat and name all its parts as per the chapter. 3. Write a short story on a voyage (connecting with your family)

3	JULY		The Address	<ol style="list-style-type: none"> <li>1. Impact of war.</li> <li>2. Pre &amp; Post war era.</li> <li>3. Haunting Memories</li> </ol>	<ol style="list-style-type: none"> <li>1. Interaction - On address and its social importance.</li> <li>2. Group Discussion - World War – II</li> <li>3. PPT/Videos &amp; Handouts</li> <li>4. Dramatization Technique</li> </ol>	<ol style="list-style-type: none"> <li>1. Dramatization - Role play in the class.</li> <li>2. Pen portrait of Mrs. Dorling and Mrs. S</li> </ol>
			Clauses, Transformation of sent. ,Re-ordering	<ol style="list-style-type: none"> <li>1. Samples and Format will be shared.</li> </ol>	<ol style="list-style-type: none"> <li>1.Explanation</li> <li>2.presentation</li> </ol>	Class test
4	AUGUT		Discovering Tut: Saga Continues	<ol style="list-style-type: none"> <li>1. Ancient Egyptian History. 2. Introduce - King Tutankhamun.</li> <li>3. Belief of Resurrection.</li> </ol>	<ol style="list-style-type: none"> <li>1. Introduction to Tut's Family 2. Discovery of his Tomb. 3. Technological Advancements and myths associated with it.</li> </ol>	<ol style="list-style-type: none"> <li>1. Project of Life of Tutankhamun.</li> </ol>
			The Laburnum Top	<ol style="list-style-type: none"> <li>1. Life of a tree.</li> <li>2. Relationship of tree and nature.</li> <li>3. Sounds and symbol</li> <li>4. Poetic devices.</li> </ol>	<ol style="list-style-type: none"> <li>1. Active Participatory learning pedagogy.2. PPT based explanation for visual connect.</li> <li>3. Rhythm &amp; Intonation</li> <li>4. Poetic devices</li> </ol>	<ol style="list-style-type: none"> <li>1. Write difficult words/meaning and make Pictures it.</li> </ol>
			Assessment of Listening & Speaking – TERM I	<ol style="list-style-type: none"> <li>1.Assessments on various different socio – economic topics</li> </ol>	<ol style="list-style-type: none"> <li>1. Voice Modulation 2. Pronunciation</li> <li>3. Grammatical Accuracy.</li> <li>4. Expressions Used.</li> <li>5. Problem Solving Ability.</li> </ol>	Interview Based Assessment to enhance speaking skills and confidence level
5	SEPTEMBER		The Voice of the Rain	<ol style="list-style-type: none"> <li>1. Water Life Cycle</li> <li>2. Figure of Speech Used. 3. Dialogue Based Description</li> <li>4. Poetic Devices</li> </ol>	<ol style="list-style-type: none"> <li>1. Digital pictorial presentation of the Poem.</li> <li>2. Poet &amp; background</li> <li>3. Group Discussion - Rain &amp; its cycle.</li> </ol>	<ol style="list-style-type: none"> <li>1. Make a handmade water cycle with all the terms used in the poem.</li> </ol>
			Landscape of the Soul	<ol style="list-style-type: none"> <li>1. Comparison B/W Chinese Vs European Art Forms.</li> <li>2. Examples and Anecdotes.</li> <li>3. Chinese Terms and Expiation</li> <li>4. Realm of Nek Chand</li> <li>5. Brut/Outside Art</li> </ol>	<ol style="list-style-type: none"> <li>1. Group Discussion - Chinese Art &amp; European Art</li> <li>2. E-Learning - Pictorial Presentation</li> </ol>	<ol style="list-style-type: none"> <li>1. Paste a Picture of both Art forms in the notebook and write comparison</li> </ol>
			The Ailing Planet	<ol style="list-style-type: none"> <li>1. Environmental Issues and Concerns. 2. Holistic and Ecological Developments.</li> <li>3. Sustainable Development 4. Ways to protect environment</li> </ol>	<ol style="list-style-type: none"> <li>1. Present Environment Linkage.</li> <li>2. Complex Thinking</li> <li>3. Interactive Learning</li> </ol>	<ol style="list-style-type: none"> <li>1. Write an Article on "Environment Degradation"</li> </ol>

			Albert Einstein at School	1. School Life of Albert Einstein. 2. His Idea of Education. 3. Relationship and Friendship. 4. Plan of Escape	1. Collaboration - Discussion & Debating 2. Problem Solving & Analytical Skills	1. Research on Albert Einstein and his Invention
	SEPTEMBER		Business letters/ Authority Letters	1. Format and Types of letters 2. Purpose and Presentation. 3. Language 4. Marking Scheme	1. PPT demonstrating the technique of writing Classified Ads. 2. Discussion - Format & Samples	Handouts & Worksheet on Business Letters.
6	OCTOBER		Assessment of Listening & Speaking TERM-II	1. Assessments on various different socio - economic topics	1. Voice Modulation 2. Pronunciation 3. Grammatical Accuracy. 4. Expressions Used. 5. Problem Solving Ability	Interview Based Assessment to enhance speaking skills and confidence level
	OCTOBER		Classified Advertisement	1. Format and Types of Posters 2. Purpose and Visual Presentation. 3. Language 4. Marking Scheme	1. E-Learning - Format & sample 2. Method of designing attractive poster 3. Activity oriented.	1. Design a visually attractive poster on a given topic
			Mother's Day	1. Status of a Mother. 2. Role Reversal. 3. Lesson Taught to Family members	1. Real Life Linkage. 2. Anticipatory Method. 3. Complex Thinking 4. Interactive Learning	1. Poster Making - Gender Equality.
	NOVEMBER		Debate Writing	1. Format & Presentation 2. Famous Speaker and their Speeches. 3. Marking Scheme	1. Learning - Format & sample 2. Method of writing and its relevance. 3. Activity oriented.	1. Group Debate - On some Social Issues
	NOVEMBER		The Browning Version	1. Character Analysis 2. Student Vs Teacher	1. Blended Learning 2. Real Life Linkage 3. Complex Thinking 4. Student's Opinion	1. Design a Cross word sheet. 2. Write a character comparison on Mr.Crocker Haris & Frank
	NOVEMBER		Art Integrated Learning Activity	Various Language Based Activities	1. Student Oriented 2. Communication 3. Creativity & Innovation	1. Performing Art 2. Interactive Sessions for Language excellence 3. Role Play, Debate, Quiz etc.
	DECEMBER		Childhood	1. Stages of Childhood. 2. Transition through different stage	1. Types of Poetry 2. Rules Of Recitation. 3. Figurative Language. 4. PowerPoint presentation	1. Poster making - Stages of Life. 2. Essay on Childhood experience.
	DECEMBER		Birth	1. Characters Descriptions 2. Professional Dilemma 3. Bookish Vs Practical Knowledge	1. Group Discussion -Professional Commitments 2. Critical Analysis & Collaboration 3. Digital Module etc.	1. Debate - "2 yrs. The internship should be made compulsory to medical graduates." 2. Role Play - Character analysis.
			Note Making	1. Format & Marking Scheme. 2. Presentation and Alignments 3.	1. PPT demonstrating the technique and art of note-making. 2. Format	1. Make notes on the textbook chapter, 'we are note afraid to die'. 2. Make annotations

			Samples & Practice Questions	Discussion 3. Annotation, outline notes, column notes, mind maps, and summary notes.	on newspaper articles, filter important points and sub-points by color coding them, and paste them into the school notebook	
	JANUARY		Silk Road	1. Ancient Silk Route. 2. Pilgrims and their Beliefs. 3. Travelogue and description of places. 4. Hardship faced by the narrator.	1. Digital Module. 2. Collaborative Learning. 3. Pictorial Presentation. 4. Brain-Storming Session	1. Map Work - Locate & Mark Silk Route on the Map and paste it into the notebook
	JANUARY		Art Integrated Learning Activities	Various Language-Based Activities	1. Student Oriented 2. Communication 3. Creativity & Innovation	1. Performing Art 2. Interactive Sessions for Language Excellence 3. Role Play, Debate, Quiz, etc.
			Project Submission & viva	1. Project Work Review. 2. Viva	1. Oral discussion.	Interview Based Assessment to enhance speaking skills and confidence level
	FEBRUARY		Revision - Complete Syllabus		1. Group Discussion. 2. Student-centric approach. 3. E-Learning 4. Digital Modules	1. Oral Test & Discussions. 2. Google Forms & Quiz 3. Written Surprise Test 4. Revision through Role Play

<b>Date</b>	<b>Examination</b>
September	Term – I
December	Term - II
March – III	Term - III



4.	AUGUST 1-31	Permutations and Combinations  Binomial Theorem	15  10	Fundamental principle of counting. Factorial n. Permutations and combinations and their applications  Historical perspective, statement and proof of the binomial theorem for positive integral indices. Pascal's triangle, simple applications.	Cooperative and Collaborative Learning, Hands on Practice, Student centered learning environment  Computational Thinking, Collaboration	To find the number of ways in which three cards can be selected from given five cards.  To construct a Pascal's Triangle
5.	SEPTEMBER 1-30	Straight Line  TERM-I EXAM	15  TERM-I EXAM	Slope of a line and angle between two lines. Various forms of equations of a line: parallel to axis, point -slope form, slope intercept form, two-point form, intercept form, Distance of a point from a line  TERM-I EXAM	Interactive cum discussion method, Problem solving	DRAW STRAIGHT LINES ON A PLANE .
6.	OCTOBER 1-31	Sequence and Series  Conic Sections	15  12	) Geometric Progression (G.P.), general term of a G.P., sum of n terms of a G.P., infinite G.P. and its sum, geometric mean (G.M.), relation between A.M. and G.M.  Sections of a cone: circles, ellipse, parabola, hyperbola, a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section.	Argumentative Learning, Context Based Learning	To demonstrate that the Arithmetic mean of two different positive numbers is always greater than the Geometric mean.  To construct different types of conic sections.
7.	NOVEMBER 1-30	Introduction to Three-dimensional Geometry  Limits and Derivatives	10  20	Coordinate axes and coordinate planes in three dimensions. Coordinates of a point. Distance between two points.  Derivative introduced as rate of change both as that of distance function and geometrically. Intuitive idea of limit. Limits of polynomials and rational functions trigonometric, exponential and logarithmic functions. Definition of derivative relate it to slope of tangent of the curve, derivative of sum, difference, product and quotient	Problem Solving, E learning, Computational thinking	To find analytically limit of functions
8.	DECEMBER	CONTINUOUS		DO-	-DO-	-DO-

	1-31 TERM-II EXAM	FOR LIMITS AND DERIVATIVE		TERM-II EXAM		
9.	JANUARY	Statistics	15	Measures of Dispersion: Range, Mean deviation, variance and standard deviation of ungrouped/grouped data	Problem Solving, Critical Thinking	
10	FEBRUARY TERM -III	Probability EXAMINATION	15	Axiomatic (set theoretic) probability, connections with other theories of earlier classes. Probability of an event, probability of 'not', 'and' and 'or' events.	Problem Solving, Critical Thinking	To write the sample space, when a coin is tossed once, two times, three times, four times.

## **Subject : Physical Education**

Sr.No.	Duration	Chapter / Topic	NTP	Syllabus Covered	Pedagogy(Lerner Centered)	Art Intergrated /Other Activities
1	April	Changing Trends And Career In Physical Education		Development Of Physical Education In India, Changing Trends, Career Option In Physical Education	Question Answer Technique	Write About The Playing Surface
2	May	Olympism		Olympism, Olympic Value, Olympics, Olympic Movement Structure.	Brainstorming ,Context Based Learning.	Olympic Games
3	May	Yoga		Active Life Style, Meaning Of Yoga, Yogic Kriyas, Pranayam And Its Type	Question Answer Technique Demonstration, Context Based Learning.	Draw Five Asasnas .
4	July	Physical Education And Sports (Cwsn)		Disability, Disability Atiquette, Aims And Objectives,Various Professionals	Brainstorming ,Context Based Learning.	Write About The Ant Two Professionals For Cwsn .
5	August	Physical Fitness ,Health And Wellness		Meaning And Importance, Traditional Sports,Leadership, Firstaid-Price	Question Answer Technique, Context Based Learning, Incidental Learning.	Write About The Regional Games.
6	September	Test, Measurement And Evaluation		Test, Measurement, Bmi, Somato Types ,Measurement Of Health Related Fitness	Brainstorming ,Context Based Learning, Question Answer Technique.	Draw About The Bmi.
7	October	Fundamental Of Anatomy And Physiology In Sports		Anatomy, Physiology, Skeleton System,Circulatory System, Respiratory System	Context Based Learning, Brainstorming, Question Answering Tecnique.	Draw Structure Of Skeleton System.
8	November	Fundamental Of Kinesiology And Biomechanics In Spors		Biomechanics, Kinemtics In Sports, Axis And Planes	Demonstration ,Context Based Learning,Brainstorming.	Write About The Role Of Equipmentn Used In Sports .
9	December	Psychology And Sports		Team Cohesion And Sports, Adolescent,Importance Of Psychology.	Question Answer Technique, Context Based Learning, Incidental Learning.	Write The Topic About The Team Cohesion .
10	January	Traning And Doping In Sports		Principle Of Sport Training, Warm-up, Technique, Doping In Sports	Explanation Methods, Brainstorming, Context Based Learning.	Draw About The Perfomance Inhancing Substances .

## Subject :- Physics

S. No.	Durati on	Chapter/Topic	NTP	SyllabusCovered	Pedagogy(learner centered)	Art Integrated/Other Activities
1.	April	<b>Units And Measurements</b>	20	Chapter1: Units And Measurements Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived Units .Dimensions of physical quantities, dimensional analysis and its applications	Demonstration,E- learning, Brainstorming, Computational thinking. The Objective of this chapter is to make the learners to know about the different types of measurement system of units and significance & application of dimensional analysis	Using experimental data computethe errors in various quantities. To measure diameter of a small spherical/cylindrical body using Vernier Caliper's.
2.	May	<b>Motion In A Straight Line</b>	12	Chapter2: Motion In A Straight Line. Uniform and no uniform motion, average speed and instantaneous Velocity. Uniformly accelerated motion, velocity-time and position time graphs. (3) Relations for uniformly accelerated motion (Graphical treatment).	Incidental Learning, Context Based Learning, Brainstorming to clear the concept of motion of a body with relating it to real life examples and to have basic concept of calculus method to Derive three basic equations of kinematics.	1. Plot position vs. time graph for the following cases a) Stationary motion b)uniform motion c) nonuniform motion 2. Plot velocity vs. time graph for the following cases and calculateslope in each case a)uniform acceleration b) non uniform acceleration c) deceleration
3.	July	<b>Motion In A Plane</b>	20	Chapter 3: Motion In A Plane (Contd.). Elementary concepts of differentiation and Integration for describing motion Cases of uniform velocity and uniform acceleration – Projectile motion. Uniform Circular motion.	E- Learning, Brainstorming,Computational Thinking. On line teaching, PPT, Short videos. Test through Google drive. The Objective of this chapter is to know about projectile motion of body and calculation of its Different parameters With real life examples.	To find the weight of a given body using parallelogram law of Vectors. Field study to see different types of projectile motion
4.	August	<b>Laws Of Motion</b>	18	Chapter 4:Laws Of Motion: Newton's first law of motion; Momentum and Newton's second law of motion; impulse; Newton's third law of motion. Law of conservation of linear Momentum and its applications	E-Learning, Experiential based learning, Argumentation,Incidental Based Learning. to clear the concept of Forces Momentum and different laws of motion given by Sir Newton.	Experiential based activity: The students will be asked to calculate the coefficient of friction between a block of wood and glass.
5.	Septe mber	<b>Work, Power And Energy</b>	6	Chapter 5: Work, PowerAnd Energy Work done by a constant force and a variable force; kinetic energy, work-energy Theorem, power. Conservative forces; conservation of mechanical energy .non-conservative forces; motion in a vertical circle, elastic and inelastic collisions in one and two Dimensions.	Demonstration,E-learning, Computational Learning. to clear the concept Work, Energy and Power and its application in our daily life which helps us to approach and to solve the Problem technically.	An object of mass 20 kg is dropped from a height of 4 m. Fill in the blanks in the following tableby computing the potential energyand kinetic energy in each case. Take $g = 10 \text{ m/s}^2$
6.	Octob er	<b>System Of Particles And Rotational Motion</b>	18	Chapter6: System Of Particle and rotational Motion Centre of mass of a two particle system, momentum conservation and Centre of mass motion. Equilibrium of rigid bodies, rigid body rotation	Activity oriented, Use of Multimedia, Demonstration. The concept of rotational dynamics by relating it with the motion of body In a straight line.	PPT On Applications Of Law OfConservation Of Angular Momentum. To find the downward force, along an inclined plane, acting on a roller due to gravitational pull of the earth and study its relationship with the angle of inclination ( $\theta$ ) by



				and equation of rotational motion, comparison of linear and rotational motions; moment of inertia, radius of gyration.		plotting graph between force and $\sin \theta$
7.	November	<b>Gravitation + Properties Of Bulk Matter</b>	20	Chapter 7: Gravitation Chapter 8: Mechanical Properties Of solids. Kepler's laws of Planetary motion. The Universal law of gravitation. Acceleration due to gravity and its Variation with altitude and depth. Gravitational potential energy; gravitational potential. Escape velocity, orbital velocity of a Satellite. Elastic behavior, Stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear, modulus of rigidity, Poisson's ratio; elastic Energy.	Demonstration, E-learning, Computational Learning. To make the learners to understand the concept of elasticity and rigidity of a body with stress strain analysis and applying it to solve real Life problems.	Experiential Based Activity: Suppose that the book has a mass $m$ , and the table top is a distance $h$ above the floor. Write down an equation for the work $W$ done by gravity on the book as it falls from the table top to the floor To determine radius of curvature of a given spherical surface by a Spherometer
8.	December	<b>Properties Of Bulk Matter</b>	15	Chapter 8: Mechanical Properties Of Fluids Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes). application of surface tension ideas to drops, bubbles and Capillary rise.	Activity method, Experiential Learning, E-Learning.	Using Labs find the spring constant of a helical spring.
9.	January	<b>Thermodynamics Waves And Oscillations</b>	16	Chapter 11: Thermodynamics Chapter 12: Oscillations Thermal Properties of Matter Kinetic theory of gases Equation of state of a perfect gas, work done on Compressing a gas. Kinetic energy and temperature	Learning Through Argumentation, Incidental Learning, Computational Thinking.	Draw Flow Chart To depict the working of a refrigerator and a Carnot cycle. Numerical based on waves and oscillations.
10.	February	<b>Waves And Oscillations (Contd.) + Revision for Annual Exams</b>	9	Chapter 13: Waves Periodic motion – period, frequency, displacement as a function of time. Periodic functions. Simple harmonic motion (SHM) and its equation; Wave motion. Longitudinal and transverse waves, Speed of wave motion. Displacement relation for a Progressive wave	E- Learning, Discussion, Concept based learning. To understand the concept of Wave motion, beats	Mathematical analysis of waves along its basic parameters (Amplitude, Frequency and Phase)

**Note:** Students will be asked to record the practicals in their practical file as per the cbse syllabus.

**First Semester Examination Syllabus will be as per the C.B.S.E. Directives.**

## Computer Science

S.N	Duration	Chapter/Topic	Syllabus Covered	Pedagogy (Learner centred)	Art Interated/ Other Activities
1.	April 1 <sup>st</sup> – 30 <sup>th</sup>	Comp System & Organization	Basics of Computer	Demonstration, Project based.	Mind map on type of software.
2.	May 1 <sup>st</sup> – 27 <sup>th</sup>	Comp System & organization	Number system Boolean	E- Learning, Class Exercise	Prepare a PPT on Number systems
3.	July 1 <sup>st</sup> – 31s	Basics of Python Conditional Statements	1.Data types 2.Operators 3.Expressions (if-else statement)	E- learning, Plausibility of Choices, Computational Thinking	Draw the decision tree of if statement
4.	Aug 1 <sup>st</sup> – 31 <sup>st</sup>	Periodic Test-1 + Iterative statements	While loop For loop	E-Learning, Flowchart method	Flow chart and algorithm.
5.	Sept 1 <sup>st</sup> - 30 <sup>th</sup>	Sequence data types	List	Use of Multimedia, Demonstration	Show diagrammatically append, insert and concatenate operation on List.
6.	Oct. 1 <sup>st</sup> – 31 <sup>st</sup>	Sequence Data types	Strings	Use of Multimedia, Demonstration	String concatenation and multiplication
7.	Nov. 1 <sup>st</sup> – 30 <sup>th</sup>	Sequence Data types	Tuple	Activity method, Experiential Learning , E-Learning	Difference between List and tuple in context of mutable and non-mutable
8	Dec. 1 <sup>st</sup> – 30 <sup>th</sup>	Sequence Data types	Dictionary	E- learning, Discussion, Concept based learning.	Difference between List and Tuple.
9.	Jan 10 <sup>th</sup> – 31 <sup>st</sup>	Python Module	Importing inbuilt Modules	Presentation.	Make a collage on sequencedata type in python.
10.	Feb 1 <sup>st</sup> – 15 <sup>th</sup>	Cyber safety Social Media Ethics	Definition Types & cyber crimes	E-learning, Cloud computing and Discussion	Prepare a basic instructionposter to show Social Media Ethics

## Economics

SN.	CHAPTER/TOPIC	NTP	DURATION	TOPIC/Syllabus to be covered	PEDAGOGY	ART INTEGRATED ACTIVITY
1	Basic concepts of microeconomics and statistics		<u>April</u>	<b>Micro Economics:</b> Chapter Introduction, Chapter - Consumers Equilibrium <b>Statistics:-</b> Chapter : Meaning, Scope, Functions, and Importance in Economics	# Quiz # Assertion and Reasoning	# Collage on Introduction
2	<b>Theory of demand</b>		<b>May</b>	Chapter - Demand <b>( Project Work will be given to them)</b>	#Teacher interaction through detailed cross questions # E- newspaper	# Tabulation # Giving real experience
3	<b>Price elasticity of demand</b>		<b>July</b>	<b>Micro Economics:-</b> Chapter - Elasticity of Demand, Chapter - Supply  <b>Statistics:</b> Chapter - Collection of Primary and Secondary Data, Chapter - Organisation of Data	# Simulation of the Talk show demand	# Diagrammatic Representation
4	<b>Production function</b>  <b>Presentation of data</b>		<b>August</b>	<b>Micro Economics:</b> - Chapter - Production Function, Chapter - Cost <b>Statistics</b> Chapter - Tabular Presentation, Chapter - Graphic Presentation Revision	# Quiz # Assertion and Reasoning	# Poster-making cost
5	<b>Concept of cost</b>		<b>September</b>	<b>Micro Economics:-</b> Chapter: Revenue	#Observation # Questioning # Graphic Order	#Designing the cover page of the newspaper
6	<b>Mean, median and mode</b>		<b>October</b>	<b>Micro Economics:-</b> Chapter - Producers Equilibrium <b>Statistics:</b> -Chapter - Measures of Central	# Creating awareness among students # Lecture Method	# Poster making on the State of the Mean, Medium, and Mode # Graphic Order
7	<b>Perfect competition form of market</b>		<b>November</b>	<b>Micro Economics;-</b> Chapter - Main Markets	# Discussion and Brain Storming session # Report making on the	# Debate on Main Markets

				<b>Statistics</b> , Chapter-Correlation	correlation	
<b>8</b>	<b>Positive and negative correlation</b>		<b>December</b>	<b>Economics</b> ;- Chapter - <b>Micro</b> Price Determination with Simple Application  <b>Statistics :-</b> Chapter :-Correlation (Cont)	#Quiz # Assertion and Reasoning	#Making Pie diagrams on - Price Determination with Simple Application
<b>9</b>	<b>Consumer price index and whole sale price index</b>		<b>JANUARY</b>	<b>Statistics</b>  Chapter - Index Number	# Creating awareness among students	# Graphic Order
<b>10</b>			<b>FEBRUARY</b>	Chapter Index Number Revision	# Lecture Method #Critical evaluation of the impact radius of the Economic Reforms	

## ACCOUNTANCY

S.N.	Month	Duration	NTP	Chapter	Syllabus Covered	Pedagogy	Activities
1	April	Apr 1-30	8-10	Chapter 1: Introduction to Accounting, Chapter 2: Accounting Terminology	Meaning, objectives, and types of accounting. Basic accounting terms: assets, liabilities, revenue, expenses, capital, drawings.	Lecture, Discussion	Quiz on Accounting Terms
2	May	May 1-31	12-14	Chapter 3: Theory Base of Accounting, Chapter 4: Basis of Accounting, Chapter 5: Accounting Equation	Accounting concepts, conventions, and principles. Accrual basis vs. cash basis of accounting. Accounting equation and its applications.	Interactive Sessions, Workshops	Creating Accounting Stories
3	July	July 1-31	12-14	Chapter 6: Rules of Debit and Credit, Chapter 7: Source Documents and Vouchers, and Journal	Rules for debit and credit in accounting transactions. Importance of source documents, types of vouchers, recording transactions in the journal.	Role Play, Group Activities	Journal Entry Games
4	August	Aug 1-31	12-14	Chapter 9: Ledgers, Chapter 10: Cash Book, Chapter 11: Subsidiary Books	Function and importance of ledgers, format of a ledger. Types of cash books, preparation of cash book. Types of subsidiary books and their preparation.	Seminars, Practical Work	Ledger Maintenance Project
5	September	Sep 1-30	12-14	Chapter 12: Bank Reconciliation Statement, Chapter 13: Trial Balance	Purpose and preparation of bank reconciliation statement. Objectives and preparation of trial balance, errors and their rectification.	Workshops, Case Studies	Bank Statement Analysis

SEMESTER- II							
6	October	Oct 1-31	12-14	Chapter 14: Depreciation, Chapter 15: Provisions and Reserves, Chapter 16: Rectification of Errors	Methods of calculating depreciation, factors affecting depreciation. Types of provisions and reserves, their importance. Steps in rectification of errors.	Lecture, Group Discussion	Depreciation Calculation Exercise
7	November	Nov 1-30	12-14	Chapter 17: Financial Statements and Chapter 18: Financial Statements with Adjustments	Preparation of financial statements: Trading and Profit & Loss Account, Balance Sheet. Adjustments in preparation of financial statements, closing stock, outstanding expenses.	Interactive Sessions, Project Work	Preparing Financial Statements Project

**SEMESTER – II CHAPTER 1-18**

**SEMESTER – III CHAPTER 1-18+ISSUE OF SHARES FROM CLASS XII SYLLABUS**

## Subject :- Biology

Sl.	DURATION	CHAPTER/TOPIC	NTP	SYLLABUS COVERED	PEDAGOGY/TEACHING METHODOLOGY	ACTIVITY
1	JULY	<b>BIOLOGICAL CLASSIFICATION</b>  <b>PLANT KINGDOM</b>		Five kingdom classification; Salient features and classification of Monera, Protista and Fungi into major groups; Lichens, Viruses and Viroid's.  Salient features and classification of plants into major groups - Algae, Bryophyta, Pteridophytes, Gymnosperms and Angiospermae (salient and distinguishing features and a few examples of each category); Angiosperms - classification up to class, characteristic features and examples.	real-life scenarios  Hands on activities	Activity based learning two kingdom Vs five kingdom  Activity on how viruses discovered.  Flow chart to show life cycle of bryophytes  Classification chart of plants based on scientific characteristics
2	AUGUST	<b>ANIMAL KINGDOM</b>		Salient features and classification of animals, non-chordates up to phyla level and chordates up to class level (salient features and distinguishing features of a few examples of each category).	Experimental learning	flow chart to show characteristics used for classification

		<p><b>MORPHOLOGY OF FLOWERING PLANTS</b></p> <p><b>ANATOMY OF FLOWERING PLANTS</b></p>		<p>Morphology and modifications: Morphology of different parts of flowering plants: root, stem, leaf, inflorescence, flower, fruit and seed. Description of families: Fabaceae, Solanaceae and Liliaceae</p> <p>Anatomy and functions of different tissues and tissue systems in dicots and monocots. Secondary growth.</p>	<p>Experimental learning and demonstration method</p> <p>Visualization and differentiation</p>	<p>taxonomically arranged chart on all groups of animals. Modification of roots, stems, and leaves shown in images and students identify modification is for what purpose Dissection of floral parts and their display Classification chart on types of plant tissue Colourful diagram on T.S of dicot root.</p>
3	SEPTEMBER	<p><b>STRUCTURAL ORGANISATION IN ANIMALS</b></p> <p><b>REVISION FOR HALF YEARLY EXAM</b></p>		<p>Animal tissues; Morphology, Anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of an insect- cockroach (a brief account only).</p>	<p>Visual clues and lecture</p>	<p>Classification chart on types of animal tissue</p> <p>Diagrammatic representation of anatomy of earthworm</p>
4	OCTOBER	<p><b>CELL THE UNIT OF LIFE</b></p> <p><b>BIOMOLECULES</b></p> <p><b>CELL CYCLE AND CELL DIVISION</b></p>		<p>Cell theory and cell as the basic unit of life, structure of prokaryotic and eukaryotic cells; Plant cell and animal cell; cell envelope; cell membrane, cell wall; cell organelles - structure and function; endomembrane system, endoplasmic reticulum, golgi bodies, lysosomes, vacuoles, mitochondria, ribosomes, plastids, microbodies; cytoskeleton, cilia, flagella, centrioles (ultrastructure and function); nucleus.</p> <p>Chemical constituents of living cells: biomolecules, structure and function of proteins, carbohydrates, lipids, nucleic acids; Enzymes- types, properties, enzyme action nCell cycle, mitosis, meiosis and their significance</p>	<p>Science text cards and lecture</p> <p>Graphic organizer and lecture</p> <p>Virtual science labs, lecture and demonstration</p>	<p>Making of paper model on structure of the plasma membrane.</p> <p>Construction of infographic representation on endomembrane system Making model with wool thread and paper on proteins Making model with clay on DNA Making of cell cycle wheel Clay models on behaviour of chromosomes during crossing over</p>

5	NOVEMBER	<p><b>PHOTOSYNTHESIS IN HIGHER PLANTS</b></p> <p><b>RESPIRATION IN PLANTS</b></p>	<p>Photosynthesis as a means of autotrophic nutrition; site of photosynthesis, pigments involved in photosynthesis (elementary idea); photochemical and biosynthetic phases of photosynthesis; cyclic and non-cyclic photophosphorylation; chemiosmotic hypothesis; photorespiration; C3 and C4 pathways; Factors affecting photosynthesis. Exchange of gases; cellular respiration - glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic); energy relations - number of ATP molecules generated; amphibolic pathways; respiratory quotient.</p>	<p>Argue with science and lecture</p> <p>Context based learning</p> <p>Computational thinking i.e., breaking large problem into small units</p>	<p>Foldable chloroplast model construction</p> <p>Interactive notebook activity on comparison between C3 AND C4 cycle</p> <p>Clay model showing breakdown of glucose</p> <p>Chart display on citric acid cycle</p>
6	DECEMBER	<p><b>BREATHING AND EXCHANGE OF GASES</b></p> <p><b>BODY FLUIDS AND CIRCULATION</b></p>	<p>Respiratory organs in animals (recall only); Respiratory system in humans; mechanism of breathing and O<sub>2</sub> regulation in humans - exchange of gases, transport of gases and regulation of respiration, respiratory volume; disorders related to respiration - asthma, emphysema, occupational respiratory disorders</p> <p>Composition of blood, blood groups, coagulation of blood; composition of lymph and its function; human circulatory system - Structure of human heart and blood vessels; cardiac cycle, cardiac output, ECG; double circulation; regulation of cardiac activity; disorders of circulatory system - hypertension, coronary artery disease, angina pectoris, heart failure</p>	<p>Embodied learning in which mind and body both work together to explore science</p> <p>Projects and lecture</p>	<p>Playing a board game to understand mechanism of gas exchange.</p> <p>Solving respiratory system crossword puzzle</p> <p>Classification chart on composition of blood</p> <p>Activity to measure pulse rate working in pair</p>

7	JANUARY	<b>EXCRETORY PRODUCT AND THEIR ELIMINATION</b>		<p>Modes of excretion - ammoniotelic, ureotelism, uricotelism; human excretory system – structure and function; urine formation, osmoregulation; regulation of kidney function - renin - angiotensin, atrial natriuretic factor, ADH and diabetes insipidus; role of other organs in excretion; disorders - uremia, renal failure, renal calculi, nephritis; dialysis and artificial kidney, kidney transplant</p> <p>Types of movement - ciliary, flagellar, muscular; skeletal muscle, contractile proteins and muscle contraction; skeletal system and its functions; joints; disorders of muscular and skeletal systems - myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout.</p> <p>Types of movement - ciliary, flagellar, muscular; skeletal muscle, contractile proteins and muscle contraction; skeletal system and its functions; joints; disorders of muscular and skeletal systems - myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout</p>	<p>Multimedia approach</p> <p>Video clips and lecture</p>	<p>Diagrammatic representation of each part of nephron and its function</p> <p>Flow chart showing the regulation of kidney functions.</p> <p>Making of sarcomere model with paper</p> <p>Visit to biology lab and identification of the bones</p>
8	FEBRUARY	<b>NEURAL CONTROL AND COORDINATION</b>		<p>Endocrine glands and hormones; human endocrine system - hypothalamus, pituitary, pineal, thyroid, parathyroid, adrenal, pancreas, gonads; mechanism of hormone action (elementary idea); role of hormones as messengers and regulators, hypo - and hyperactivity and related disorders;</p> <p>dwarfism, acromegaly, cretinism, goiter, exophthalmic goiter, diabetes, Addison's disease.</p> <p>Note: Diseases related to all the human physiological systems to be taught in brief.</p>	<p>Observation and lecture</p>	<p>Activity with paper cut outs showing charge reversal</p> <p>Making of model of internal ear and understanding the working mechanism</p>
	<b>MARCH</b>	<b>REVISION of final term</b>				



**Subject :- Chemistry**

S. No.	Duration	NTP	Chapter/ Topic	Syllabus Covered	Pedagogy(learner centred)	ArtIntegrated/ OtherActivities
1.	April		Unit 1: Some basic concept of chemistry	Basic unit ,unit conversion ,mass ,mass percent ,law of chemical combination	Co-operative learning , context based learning	Make flow chat of centi and deci units
2	MAY		UNIT -1 Some basic concept of chemistry	Emperical formula, limiting reagent	INQUIRY BASED LEARNING	Make model of atom
3	JULY		Unit -2 Structure of atom	Atom, discovery of proton ,electron ,and neutron	Classroom technology LEARNING,PROBLEM SOLVING	To prepare 250 ml solution of potassium per magnet salt
4	July		UNIT-3 Periodic classification	law's related with periodic table,general properties of periodic table	Integrative learning Compare contrast method, e-learning	Draw flow chart of bond angle and hybridization
	August		Unit -4 Chemical bonding	octate rule ,ionic compound ,covalent compound,hybridisation VBT,VESPER theory,MOT	Brainstorming method Adaptive method	Draw the applications of Hess law Show the shifting of reaction of reaction by changing of concentration
5	September		Revision and Term – examination Unit-5 Thermodynamics	General related terms of thermodynamics,PVwork, reversible work ,first ,secondand third law of thermodynamics Hess law, entropy Law of mass action ,equilibrium constant,acid base thoeory, salt hydrolysis	Demonstration ,multimedia ,inductive learning ,student content inquiry Adaptive method inductive method	Make setup to show electrochemical cell Make a 3D model of hydrocarbhone
6	October		Unit-6 Equilibrium	Oxidation number, Balancing of reaction	critical reaction ,inductive reaction	Make a flow chart of preparation of alkanes and alkenes
7	October		Unit-7	Application of redox reaction ,electrochemical cell	Reflective and interdisciplinary approach Critical pedagogy	

8	November	Redox reaction	IUPAC naming	Active learning Adaptive learning
		Revision and Term –II exam	Carbocation, carboanion, freeradical ,hyper cocjugation	
10	December	Unit -8	Alkane, alkene, alkyne and aromatic compound (properties ,preparation, and chemical react)	
11	JANUARY	Concept of organic chemistry,hydrocarbon		
12	February	unit -9 hydrocarbon and revision		
13-	February	revision and pre board examination revision and TERM III EXAM		