

ADRIEL HIGH SCHOOL

Powered by Pratap International Affiliated to CBSE

Session: 2025-26

Annual Planner

Class: XI

BIOLOGY

Chapter	Learning Outcomes	Pedagogy	Activities	Resources	Achievements	Gaps Identified	Remedials
1. The Living	Understand taxonomy,	Lecture,	Herbarium	Textbook,	Identify living	Difficulty with	Red Flag: Flashcard practice
World	nomenclature and	Visualization	sheets,	Flashcards	traits & naming	scientific names.	for scientific names.
No. of	Scientific names.	Discussion	Flash cards	Audio –	rules.		O White Flag: Group discussion
Periods: 4			of	Visual Aid			for concept clarity.
			Taxonomic				Green Flag: Research project
			hierarchy of				on species discovery.
			an organisms				
2. Biological	Explain the basis of	Group	Sorting	Textbook,	Classify	Confusion between	Red Flag: Simplified notes
Classification	classification Describe	discussion,	activity using	Videos,	organisms into	Monera & Protista	and mnemonic aids.
No. of	5 kingdom	Videos	images and	Specimen	kingdoms.	and their different	O White Flag: Assignment
Periods: 5	classification.		classification	models,		groups.	comparing kingdoms.
	Differentiate		chart.	charts.			Green Flag: Presentation on
	prokaryotes &						unique microorganisms
	eukaryotes.						
	Identify the different						
	kingdoms and their						
	distinguishing						
3. Plant	features.	Visual aids,	Cassa	Textbook,	Classify plants	Confusion in	Dad Floor Word floreshouts
	Differentiate plant	,	Group	· ·	Classify plants,		Red Flag: Visual flowcharts.
Kingdom No. of	groups. Explain characteristic	Group project	posters for plant	Specimens	explain life cycles.	Bryophytes and pteridophytes	O White Flag: Group quiz on plant groups.
Periods: 7	features of different		divisions		Cycles.	pteridophytes	Green Flag: Visit to Botanical
reflous.	groups of plants with		divisions				garden to observe plant
	their examples.						diversity.
4. Animal	Identify phyla.	Mind maps,	Preparation	Textbook,	Classify animals	Struggle to	Red Flag: Phylum
Kingdom	Explain classification	Comparative	of	Videos,	into phyla.	differentiate	identification flashcards.
No. of	criteria.	charts	Classification	Specimen	into piryra.	between chordata	O White Flag: Practice
Periods: 7	Cincila.	Charts	chart	models.		protochordata,	classification sheets.
r crious . /			Citatt	models.		cephalochordata	Green Flag: Develop phylum
						and urochordata.	guide with examples.
						and urochordata.	guide with examples.

5. Morphology of Flowering Plants No. of Periods: 8	Identify plant parts. and describe their functions in biological systems.	Visual aids, Demonstration	Scrapbook collection	Local specimens, Textbook	Identify different types of stem, root and leaf; different parts of an angiospermic flower and their arrangement. Explain the floral description of a flower.	Difficulty remembering terms and floral diagram and floral formula.	Red Flag: Simplified explanation with flow chart and Labeling practice. O White Flag: Diagram-based revision chart. Green Flag: Search for floral diagrams and floral formula of few local flowers.
6. Anatomy of Flowering Plants No. of Periods: 6	Explain tissues. Describe plant anatomy.	Microscope, demonstration	Prepare temporary slides, Observe & draw tissues	Permanent Slides, Microscope	Identify tissues & draw diagrams.	Difficulty identifying tissue types.	Red Flag: Tissue identification worksheets. O White Flag: Peer teaching sessions. Green Flag: Research tissue adaptations in plants.
7. Structural Organisation in Animals No. of Periods :5	Explain structural organization of Frog.	Videos, Charts	Make flash cards of different organ system of frog.	Textbook, Videos, Specimen model of life cycle of frog.	Study the external and internal structure of frog.	Confusion in two types of respiration in frog and male and female reproductive system.	Red Flag: Flashcards of different organ system. O White Flag: External and internal structure quiz. Green Flag: Case study on economic importance of frog.
8. Cell: The Unit of Life No. of Periods :6	Understand Cell Theory, Endomembranous system of cell. Structure of an eukaryotic cell, types of chromosomes. Differentiate prokaryotic & eukaryotic cells.	Visual aids, Lecture	Model- making Diagram making.	Textbook Models	□ Differentiate between gram positive and gram negative bacteria. □ Explain the structure and function of different cell organelles.	Confusion about Cell membrane and cell wall extensions. Satellite chromosomes.	Red Flag: Picture recognition and Labeling exercises. O White Flag: Cell comparison tables. Green Flag: Research project on new organelles.
9. Biomolecules No. of Periods :8	□ Analyze the chemical composition of biomolecules and their importance in metabolism. □ Differentiate between	Discussion, Visualization,	Classification chart and comparison tables.	Textbook, Videos	□Categorise biomolecules & explain. like amino acids , proteins , lipids and nucleic acid; and their role in	☐ Proteins vs enzymes confusion. ☐ Struggle to understand lipid as a biomacromolecule.	Red Flag: Simplified explanation with basics of Chemistry. O White Flag: Biomolecules crossword. Green Flag: Research biomolecules in health.

	biomacromolecules and biomicromolecules. Explain the structure, classification of carbohydrates, protein, lipids, nucleic acid, and enzymes				biological processes. □ Learn the structure of biomolecules and their extraction		
10. Cell Cycle & Cell Division No. of Periods :5	□Explain cell cycle phases. □Identify the different phases of mitosis and meiosis. □ Differentiate between mitosis and meiosis. □ Identify haploid and diploid cell ;and where these occur.	Diagrams, Visualization	Making chart or model on mitosis and meiosis.	Videos, Textbook	Explain the cell cycle and cell division. Understand the different phases of cell cycle, the different stages of mitosis and meiosis and their significance.	Confusion in interphase and interkinesis; G1, G2 and S phase.	Red Flag: Flow Diagrambased revision. O White Flag: Sequence-based quiz. Green Flag: Create 3D model.
11. Photosynthes is in Higher Plants No. of Periods :6	Explain light & dark reactions. ☐ Understand the steps of the Calvin cycle (C3 pathway) and its role in glucose formation. ☐ Compare C3, C4, and CAM plants in terms of carbon fixation. ☐ Analyze the effects of light intensity, CO ₂ concentration, temperature, and water availability on photosynthesis.	Diagrams, Experiments, Visualization	Light and photosynthesi s experiment	Plant, Textbook, Videos	□ Differentiate between light- dependent (photochemical phase) and light- independent (biosynthetic phase) reactions. □ Explain cyclic and non- cyclic photophosphor ylation and the formation of ATP and NADPH	Difficulty in Calvin cycle steps.	Red Flag: Stepwise reaction charts. O White Flag: Photosynthesis process quiz. Green Flag: Explore artificial photosynthesis.

12. Respiration in Plants No. of Periods :6	□Differentiate between aerobic and anaerobic respiration in plants and Compare them based on energy yield, products, and location. □Explain fermentation in plants, including alcoholic fermentation and lactic acid fermentation. □Identify how temperature, oxygen availability, water content, and type of substrate affect respiration rates.	Visualization, Explanation	Make flow chart representing glycolysis, Kreb's Cycle and ETS.	Videos, Textbook, Flow Chart	□ Apply Blackman's Law of Limiting Factors to understand how photosynthetic rate is controlled. □ Understand the process of Glycolysis, Krebs cycle and electron transport chain (ETC) and ATP synthesis in mitochondria. □ Explain the concept of respiratory quotient (RQ) and its significance in Explain respiration processes.	Confusion in two phases of Glycolysis Chemical reaction occurring in Kreb's cycle. Struggle to memorise electron acceptor in	Red Flag: Mnemonics for pathway. O White Flag: Comparison table activity. Green Flag: Research new respiration pathways.
13. Plant Growth & Development No. of Periods :6	□ Explain phases of growth □ Analyze growth curves and interpret data from growth measurements. □ Explore how plant hormones are used	Visualization , Explanation	Hormone function role play.	Textbook, Flow Charts	☐ Explain growth stages & hormones. ☐ Understand the role of plant hormones in growth and development.	Confusion and struggle to memorise hormone roles.	Red Flag: Hormone flashcards. O White Flag: Case study on hormones. Green Flag: Explore genetic control of growth.

	in agriculture						
14. Breathing & Exchange of Gases No. of Periods: 7	circulation. Differentiate between external respiration, internal respiration, and cellular respiration. Explain human respiratory system. Explain the process of breathing with the role of the diaphragm and intercostal muscles. Gain knowledge of common respiratory diseases like asthma, emphysema, bronchitis, pneumonia, and occupational lung diseases.	Visualization, Observation, Demonstration	Make a 3D chart explaining mechanism of breathing.	Model of human respiratory system, Textbook	□Explain the transport of oxygen by hemoglobin and carbon dioxide. □Understand how the respiratory system is regulated by the nervous system. □Know the concept of Respiratory Volumes and Capacities Define body fluids and their importance in the human body.	Confusion in alveolar exchange, partial pressure of oxygen and carbon dioxide.	Red Flag: Recapitulation and simplified explanation of partial pressure. O White Flag: Respiratory system quiz. Green Flag: Research lung disorders.
15. Body Fluids & Circulation No. of Periods :8	□Differentiate between arteries, veins, and capillaries.Compare open and closed circulatory systems. □Understand the difference between single circulation and double circulation. □Identify common cardiovascular disorders like hypertension, heart	Visualization, Observation, Demonstration	Heart model-making	Textbook Model of Human heart, Blood group system flowchart.	□Explain the composition and functions of blood and lymph. □Describe the ABO blood group system and Rh factor. □Explain the process of blood clotting. □Describe the structure and functioning of	Struggle to understand different nodal tissue location in heart and cardiac cycle	Red Flag: Reinforcement through Blood group system flowchart. O White Flag: Circulation quiz. Green Flag: Research heart transplantation and artificial hearts.

	attack, and heart failure.				the human heart and the concept of double circulation.		
16. Excretory Products & Elimination No. of Periods: 7	□Recognize various metabolic wastes like ammonia, urea, and uric acid, and classify organisms based on their excretory products (ammonotelic, ureotelic, uricotelic). □Explain the structure and function of the kidneys, ureters, urinary bladder, and urethra. □Understand processes like ultrafiltration, selective reabsorption, and tubular secretion in nephron function.	Diagrams, Visualization.	Make working model of nephron and dialysis machine.	Charts, Videos	□ Identify different types of nitrogenous waste products and their excretion in different organisms. □ Explain the structure and function of the human excretory system. □ Understand osmoregulation and the role of ADH. □ Discuss disorders related to the excretory system.	Difficulty in nephron parts and their function.	Red Flag: Recapitulation through audio visual aid and Nephron labeling exercise. O White Flag: Kidney function quiz. Green Flag: Compare human and animal excretion.
17. Locomotion & Movement No. of Periods: 7	□Explain the mechanism of muscle contraction(sliding filament theory) □Describe the human skeletal system and its classification (axial and appendicular skeleton).	Demonstration Visualization	Make a flow chart representing different parts of human skeleton ,bones and joints.	Model of human skeleton Textbook	☐ Identify different types of movements, the major bones and joints of the human skeleton. ☐ Explain the role of the skeleton in support,	Struggle to grasp the Sliding – filament theory of muscle contraction.	Red Flag: Stepwise flow chart to understand the muscle contraction. O White Flag: Case studies on movement. Green Flag: Research sports injuries.

	☐ Identify different types of joints and their movements. ☐ Learn about common skeletal and muscular disorders (e.g., osteoporosis, arthritis, muscular.				protection, and movement. Explain the structure and function of muscles. Differentiate between skeletal, smooth, and cardiac muscles.		
18. Neural Control & Coordination No. of Periods :8	Explain the structure and function of the human nervous system. Differentiate between the central nervous system (CNS) and peripheral nervous system (PNS). Understand the role of the autonomic nervous system.	Reinforcement Visualization Explanation.	Make a model of human brain and a flow chart of nervous system.	Model of Neuron, Textbook	□ Label and describe parts of a neuron: dendrites, cell body, axon, synapse. □ Identify major parts: cerebrum, cerebellum, medulla oblongata, hypothalamus etc. □ Discuss the role of different brain regions in body functions.	Difficulty in grasping transmission through synapse.	Red Flag: Nerve impulse flowchart. O White Flag: Brain parts quiz. Green Flag: Research neurological disorders.
19. Chemical Control & Coordination No. of Periods: 7	☐ Identify the endocrine glands and their locations in the human body. ☐ Differentiate between endocrine and exocrine glands. ☐ Explain the role of	Visualization, Explanation	Make a flow chart showing endocrine glands, their location, hormone secreted and function	Flow Charts, Textbook	☐ Learn about Disorders Related to Hormonal Imbalance like diabetes mellitus, goiter, gigantism,	Struggle in understanding the feedback mechanism in hormone regulation.	Red Flag: Hormone flashcards. O White Flag: Case studies. Green Flag: Research on hormone therapy.

secreted by	performed by	dwarfism,	
endocrine glands.	them.	Addison's	
-		disease.	
		\Box Understand	
		the effects of	
		hyposecretion	
		and	
		hypersecretion	
		of hormones.	
		Explain glands	
		& hormones.	

ECONOMICS

Chapter	Learning Outcomes	Pedagogy	Activities	Resources	Achievements	Gaps Identified	Remedial
Introduction	Understand basic	Lecture,	Concept	Textbook,	Clarity on	Confusion in	One-on-one revision (Red
	economic concepts	Discussion,	mapping,	Articles,	fundamental	distinguishing	Flag)
	and their relevance	Real-life	Group	Videos	terms	micro &	O Group quiz (White Flag)
		examples	discussions			macroeconomics	Advanced case studies (Green
							Flag)
Consumer's	Explain consumer	Lecture, Case	Budget	Textbook,	Understanding	Difficulty in	Step-by-step problem solving
Equilibrium	behavior and utility	Study,	analysis	Videos,	of demand	applying utility	(Red Flag)
	concepts	Diagrams	activity,	Graphs	theory	concepts	O Group exercises (White Flag)
			Utility				Independent case study (Green
			calculation				Flag)
Demand	Analyze factors	Lecture,	Market	Textbook,	Knowledge of	Struggles with	Extra practice worksheets
	affecting demand,	Visual Aids,	survey,	Real-life	demand curves	exceptions to	(Red Flag)
	Law of demand	Graphical	Demand	data		demand law	O Group discussions (White
		Representatio	analysis				Flag)
		n					Independent research (Green
							Flag)
Elasticity of	Explain price elasticity	Lecture,	Elasticity	Textbook,	Understanding	Confusion in	Guided numerical practice
Demand	and its implications	Practical	calculation,	Market	of price	formula	(Red Flag)
		Examples,	Role-play as	Data	sensitivity	applications	O Peer learning exercises (White
		Graphs	sellers				Flag)
							Advanced elasticity analysis
							(Green Flag)
Production	Understand inputs and	Lecture,	Case study	Textbook,	Clarity on	Issues in	Simplified concept
Function	outputs of production	Graphs, Real-	on firms,	Industry	production	understanding	explanations (Red Flag)
		life Examples	Cost analysis	Reports	concepts	short-run vs long-	O Group discussions on case
						run production	studies (White Flag)

Cost	Explain cost concepts and cost curves Identify types of revenue and their significance	Lecture, Visual Aids, Cost Data Lecture, Graphs, Practical Applications	Real-life cost calculation, Diagram plotting Revenue comparison, Case study on companies	Textbook, Industry Case Studies Textbook, Financial Reports	Understanding of cost behavior Knowledge of revenue sources	Difficulty in drawing cost curves Confusion in distinguishing total, average, and marginal revenue	Research on firm production (Green Flag) Extra graphical practice (Red Flag) O Peer teaching activities (White Flag) Real-world cost analysis (Green Flag) Step-by-step revenue breakdown (Red Flag) O Small group problem-solving (White Flag) Advanced revenue model
Producer's Equilibrium	Explain profit maximization concepts	Lecture, Graphs, Application in Real Life	Business strategy game, Profit maximization problems	Textbook, Business Reports	Understanding of equilibrium conditions	Issues in MR=MC application	analysis (Green Flag) Extra numerical practice (Red Flag) O Peer discussion and explanation (White Flag) Independent profit study (Green Flag)
Supply	Analyze factors affecting supply, Law of supply	Lecture, Visual Aids, Market Trends	Market simulation, Supply curve plotting	Textbook, Industry Trends	Understanding of supply determinants	Confusion in shifts vs movement along supply curve	Hands-on supply curve drawing (Red Flag) O Group market discussions (White Flag) Industry-based research (Green Flag)
Main Market Forms	Differentiate types of market structures	Lecture, Case Study, Market Research	Comparison of real-world markets, Debate	Textbook, Business Articles	Awareness of perfect & imperfect competition	Issues in recognizing market structures	Simple case study analysis (Red Flag) O Group debates on market structures (White Flag) Research on different industries (Green Flag)
Price Determinatio n & Applications	Understand equilibrium price and real-world pricing	Lecture, Graphs, Market Analysis	Price determination simulations, Pricing strategy case studies	Textbook, Market Data	Understanding of price mechanisms	Struggles with demand-supply equilibrium	Guided numerical problem- solving (Red Flag) O Peer group activities (White Flag) Research on pricing strategies (Green Flag)
Economics: An Introduction	Understand basic economic concepts and their relevance	Lecture, Discussion, Real-life examples	Concept mapping, Group discussions	Textbook, Articles, Videos	Clarity on fundamental terms	Confusion in distinguishing micro & macroeconomics	One-on-one revision (Red Flag) O Group quiz (White Flag)

Meaning,	Explain the role of	Lecture, Case	Data	Textbook,	Awareness of	Difficulty in	Advanced case studies (Green Flag) Step-by-step data
Scope and Importance of Statistics	statistics in economics	Study, Data Analysis	collection exercises, Statistical analysis	Research Papers	statistical importance	interpreting statistical data	interpretation (Red Flag) O Group exercises (White Flag) Independent statistical projects (Green Flag)
Collection of Data	Understand methods of data collection	Lecture, Surveys, Real- world Examples	Conducting surveys, Data collection	Textbook, Survey Reports	Understanding of data sources	Struggles with primary vs secondary data	Guided exercises on data types (Red Flag) O Peer learning sessions (White Flag) Real-life data collection projects (Green Flag)
Organisation of Data	Learn how to organize collected data	Lecture, Hands-on Exercises, Graphical Representatio n	Organizing raw data, Data tabulation	Textbook, Online Databases	Knowledge of data structuring	Issues in systematic data arrangement	Extra practice with datasets (Red Flag) O Group discussions (White Flag) Advanced data structuring exercises (Green Flag)
Tabular Presentation	Develop skills in tabular representation of data	Lecture, Practical Examples, Tables	Creating statistical tables, Organizing numerical data	Textbook, Data Reports	Understanding tabulation	Confusion in formatting tables	Step-by-step table formatting guide (Red Flag) O Peer table evaluation (White Flag) Case study-based table creation (Green Flag)
Diagrammati c Presentation	Represent economic data using diagrams	Lecture, Diagram Analysis, Real-world Examples	Creating bar diagrams, Pie charts	Textbook, Market Reports	Understanding of visual data representation	Difficulty in selecting appropriate diagrams	Guided practice with diagrams (Red Flag) O Peer feedback on diagrams (White Flag) Independent diagrammatic research (Green Flag)
Graphic Presentation	Use graphical tools to analyze data trends	Lecture, Graph Interpretation, Real Data Examples	Drawing line graphs, Histogram creation	Textbook, Market Graphs	Knowledge of graphical trends	Issues in understanding graph scales	Extra graphical practice (Red Flag) O Peer learning activities (White Flag) Real-world data graph analysis (Green Flag)
Measures of Central Tendency -	Explain mean as a measure of central tendency	Lecture, Numerical	Mean calculation	Textbook, Statistical Software	Understanding mean calculation	Struggles with complex data sets	Guided numerical problem- solving (Red Flag)

Arithmetic Mean		Practice, Graphs	exercises, Data analysis				O Small group problem-solving (White Flag) Advanced mean-based research (Green Flag)
Measures of Central Tendency - Median and Mode	Explain median and mode as measures of central tendency	Lecture, Practical Applications, Case Studies	Median and mode calculation, Real-life applications	Textbook, Statistical Tools	Understanding of median and mode	Confusion in choosing between measures	Step-by-step comparison exercises (Red Flag) O Peer discussion and explanation (White Flag) Research-based case studies (Green Flag)
Measures of Correlation	Explain the concept of correlation and its importance	Lecture, Graphs, Data Interpretation	Correlation coefficient calculation, Case studies	Textbook, Business Data	Understanding of correlation applications	Difficulty in interpreting correlation coefficients	Extra numerical practice (Red Flag) O Peer discussion and explanation (White Flag) Advanced correlation analysis (Green Flag)
Index Numbers	Explain the role and calculation of index numbers	Lecture, Real- World Data, Statistical Applications	Index number calculation, CPI and WPI analysis	Textbook, Market Reports	Awareness of economic indicators	Confusion in different index number formulas	Guided numerical practice (Red Flag) O Small group discussions (White Flag) Independent research on index trends (Green Flag)

PHYSICAL EDUCATION

Chapter	Learning Outcomes	Pedagogy	Activities	Resources	Achievements	Gaps Identified & Remedials
Changing	Understand evolving	Lecture,	Career	Career guides,	Awareness of	Limited exposure to non-traditional careers. More
Trends and	trends and career	discussions,	exploration	industry	career paths.	industry interactions needed.
Career in	opportunities in	career	activities,	reports, online		
Physical	physical education.	counseling.	guest	resources.		
Education			lectures.			
Olympic	Learn about Olympic	Case studies,	Analysis of	Videos,	Understanding	Lack of connection between values and practical
Value	history, values, and	storytelling,	Olympic	Olympic	of Olympic	application. More real-life examples needed.
Education	ethics in sports.	discussions.	events, role-	archives,	ideals.	
	_		playing	official		
			activities.	reports.		
Yoga	Develop knowledge	Practical	Yoga	Yoga mats,	Improved	Difficulty in performing advanced postures. More
	and practice of yoga	demonstration	sessions,	videos,	flexibility and	progressive training required.
	for health and	s, theoretical	breathing	instructor-led	mental focus.	
	wellness.	explanations.	exercises.	classes.		

Physical Education and Sports for CWSN	Understand inclusive sports and physical activities for CWSN.	Inclusive education methods, demonstration s.	Adaptive sports activities, role-playing.	Assistive devices, case studies, videos.	Increased awareness of inclusive sports.	Lack of proper training in adaptive techniques. More hands-on experience needed.
Physical Fitness, Wellness, and Lifestyle	Develop awareness of fitness components and healthy lifestyle habits.	Fitness assessments, wellness coaching.	Physical activities, diet tracking.	Fitness apps, gym equipment, health journals.	Improved awareness of fitness and wellness.	Lack of consistent implementation. More personalized fitness plans needed.
Test, Measuremen ts, and Evaluation	Learn methods for assessing physical fitness and sports performance.	Hands-on measurement techniques, data analysis.	Conducting physical fitness tests.	Testing tools, evaluation sheets, software.	Ability to assess and interpret data.	Difficulty in accurate test implementation. More practical training required.
Fundamenta ls of Anatomy and Physiology in Sports	Understand the structure and function of the human body in sports.	Diagrams, models, practical experiments.	Body movement analysis, group discussions.	Anatomy charts, 3D models, lab activities.	Clear understanding of body functions.	Difficulty in linking theory to performance. More real-life examples needed.
Fundamenta ls of Kinesiology and Biomechanic s in Sports	Apply biomechanical principles to sports movements.	Motion analysis, video-based learning.	Posture correction activities, case studies.	Video analysis software, motion sensors.	Improved knowledge of movement mechanics.	Limited understanding of complex biomechanical concepts. More hands-on activities needed.
Psychology and Sports	Understand psychological factors affecting sports performance.	Discussions, case studies, role-playing.	Motivational training, stress management exercises.	Psychology books, expert talks, mental training tools.	Better awareness of mental preparation in sports.	Limited application of sports psychology. More athlete case studies needed.
Training and Doping in Sports	Understand training methods and the impact of doping in sports.	Lecture-based discussions, case studies.	Analyzing real-life doping cases, ethical debates.	Anti-doping agency reports, videos, research papers.	Better understanding of ethical sports training.	Lack of awareness of anti-doping regulations. More workshops on doping prevention needed.

INFORMATICS PRACTICES (IP)

Chapter	Learning Outcomes	Pedagogy	Activities	Resources	Achievement	Gaps	Remedials
					S	Identified	

Chapter 1: Computer System	 Understand components of a computer system. Identify software and hardware requirements. 	- Interactive discussions - Visual presentations	- Identify components in a real system - Compare different OS features	- Computers, projectors, charts	Students will be able to identify and explain computer components.	Confusion in differentiating software categories.	 - Green Flag: Research on modern hardware - White Flag: Label computer components - Red Flag: Identify OS features
Chapter 2: Emerging Trends	1. Identify latest IT trends. 2. Explain applications of AI, IoT, and cloud computing.	- Group discussions - Case studies	- Research on AI applications - Cloud computing simulation	- Online articles, videos	Students will understand emerging trends in IT.	Difficulty in distinguishing AI from automation.	Green Flag: AI project researchWhite Flag: List latest IT trendsRed Flag: Identify AI vs.automation
Chapter 3: Brief Overview of Python	 Write and execute basic Python programs. Understand syntax and semantics. 	- Hands-on coding - Live demonstrations	- Write simple Python scripts - Debugging exercises	- Python IDE, laptops	Students will be able to write and run Python programs.	Struggle with syntax errors.	Green Flag: Code simple problemsWhite Flag: Correct syntax errorsRed Flag: Debug given codes
Chapter 4: Working with Lists and Dictionaries	 Understand lists and dictionaries in Python. Perform operations on lists and dictionaries. 	- Practical coding exercises - Concept visualization	- Implement lists and dictionaries in Python programs - Debug errors in list operations	- Python documentation, IDE	Students will use lists and dictionaries efficiently.	Difficulty in differentiating mutable and immutable types.	 Green Flag: Identify mutable vs. immutable types White Flag: List dictionary methods Red Flag: Solve list-based problems
Chapter 5: Understanding Data	Understand data collection and processing. Learn statistical techniques for data processing.	- Case studies - Data visualization exercises	- Collect and analyze real- world data - Implement basic statistical operations	- Online datasets, visualization tools	Students will grasp data handling and processing concepts.	Difficulty in selecting appropriate statistical techniques.	 Green Flag: Compare statistical methods White Flag: Identify data types Red Flag: Solve basic data problems
Chapter 7: Database Concepts	1. Understand database fundamentals. 2. Differentiate between RDBMS and DBMS.	- Conceptual lectures - Practical SQL demonstratio ns	- Identify database components - Compare relational vs. non- relational databases	- SQL tutorials, MySQL server	Students will grasp database structures and types.	Confusion between primary key and foreign key.	 - Green Flag: List DBMS vs. RDBMS features - White Flag: Identify keys in a table - Red Flag: Practice SQL queries

Chapter 8:	1. Perform CRUD	- Hands-on	- Write and	- SQL editor,	Students will	Difficulty in	- Green Flag: Solve query-based
Introduction	operations using SQL.	SQL practice	execute SQL	databases	be able to	understanding	exercises
to Structured	2. Use queries to	- Query	queries		write efficient	joins.	- White Flag: Identify query types
Query	retrieve data.	debugging	- Perform		queries.		- Red Flag: Execute basic SELECT
Language			joins and				queries
(SQL)			aggregations				

^{**}Note:** Chapter 6 (Introduction to NumPy) is excluded as per syllabus requirements.

ENGLISH

Chapter	Learning Outcomes	Pedagogy	Activities	Resources	Achievements	Gaps Identified	Remedials
The Portrait of a Lady		Storytelling, Discussion	Character sketch, Personal reflection writing	INCHRI		Difficulty in understanding symbolism	Red Flag: Simplified explanation White Flag: Group discussions Green Flag: Writing an alternate perspective
We're Not Afraid to Die If We Can All Be Together	1. Understand the themes of courage and resilience. 2. Analyze the impact of teamwork and family support.	Narrative discussion, Case studies	Survival story writing, Group discussion on teamwork	NCERT Textbook	Understanding survival instincts	relating to	Red Flag: Timeline of events White Flag: Discussions Green Flag: Research on real survival stories
Discovering Tut: The Saga Continues	1. Learn about archaeological findings and historical mysteries. 2. Analyze how science helps uncover history.	Documentary analysis, Discussion	Research on other famous archaeological discoveries, Writing a report	NCERT Textbook,	Awareness of ancient civilizations	Difficulty in	Red Flag: Visual timeline White Flag: Discussions Green Flag: Research on another archaeological find
The Adventure	realities / Analyze	Storytelling, Discussion		NCERT Textbook	Understanding time travel and alternate realities	Difficulty in grasping the concept of parallel worlds	Red Flag: Visual aids White Flag: Group discussions Green Flag: Writing an alternate ending

Silk Road	1. Explore the cultural and geographical significance of the Silk Road. 2. Analyze the author's journey and experiences.	Travel writing, Discussion	Descriptive		Understanding historical trade routes	Difficulty in understanding travel literature	Red Flag: Picture- based learning White Flag: Group discussions Green Flag: Research on other ancient trade routes
Poetry							
A Photograph	1. Understand the themes of nostalgia and loss. 2. Analyze poetic devices used in the poem.	Recitation, Discussion	Writing a personal reflection on an old photograph	NCERT Textbook, Audio clips	Awareness of emotions in poetry	Difficulty in interpreting deeper meanings	personal memory poem
Top	1. Analyze the symbolism in nature poetry. 2. Understand the poet's perspective on transformation.	Recitation, Discussion	Symbolism analysis, Creative writing inspired by nature		Understanding poetic imagery	Difficulty in recognizing symbols	Red Flag: Visual representation White Flag: Group discussions Green Flag: Writing a nature-inspired poem
English Writing							
		Demonstration, Practice	Summarizing a passage, Notemaking from a lecture	Sample notes	Mastering the skill of condensing information	Struggle in identifying main points	Red Flag: Guided practice White Flag: Peer review Green Flag: Summarizing a real-world article
Advertisements		Explanation, Practice	Writing classified ads for various purposes	advertisements	Understanding concise communication	Difficulty in structuring ads	Red Flag: Format templates White Flag: Group activities Green Flag: Writing real-world advertisements
Speech Writing	-	Explanation, Practice	Writing and delivering a speech, Peer review	speeches,	Mastering formal and persuasive speaking	Struggle in organizing speech points	Red Flag: Guided outlines White Flag: Class discussions Green Flag: Writing and delivering an impromptu speech
	iargiimentative skills /	Debate, Writing practice	Conducting a debate, Writing arguments	INPWS articles	Ability to present arguments clearly	Difficulty in rebuttals	Red Flag: Step-by- step guidance White Flag: Practice debates

	and counterarguments effectively.		for/against a motion				Green Flag: Research on controversial topics
English Grammar							
Clauses	1. Identify different types of clauses. 2. Use clauses effectively in writing.	Sentence analysis, Practice worksheets	Combining sentences using clauses, Clause identification exercise	Grammar workbook	Understanding sentence structure	Confusion in dependent and independent clauses	Red Flag: Visual charts White Flag: Group exercises Green Flag: Writing complex sentences with varied clauses
Reordering of Sentences	P	Exercises, Practice drills	Rearranging jumbled sentences, Writing coherent paragraphs	Grammar workbook	Improved sentence structuring	Struggle in maintaining logical order	Red Flag: Step-by- step exercises White Flag: Group discussions Green Flag: Writing a short story with restructured sentences
Transformation of Sentences	1. Convert sentences into different grammatical forms. 2. Understand how sentence structure affects meaning.	Explanation, Sentence transformation	Converting statements into different forms (negative, interrogative, exclamatory)	Grammar workbook	Mastery of varied sentence structures	Confusion in applying transformation rules	Red Flag: Guided practice White Flag: Sentence conversion drills Green Flag: Writing a passage using different sentence transformations

PHYSICS

Chapter	Learning Outcomes	Pedagogy	Activities	Resources	Achievements	Gaps	Remedials
						Identified	
Mathematical	Understand	Problem-	Solve	Mathematics	Students	Difficulty in	Green Flag: Solve
Tools	mathematical	solving,	mathematical	reference	develop	applying	advanced calculus
	concepts used in	concept-based	problems.	books.	mathematical	calculus to	problems.
	physics.	learning.			skills.	physics.	White Flag: Identify
							key mathematical
							formulas.
							Red Flag: Discuss
							real-world

Units and Measurements	Learn SI units, dimensional analysis, errors in measurement.	Demonstrations, unit conversions.	Measure physical quantities.	Measuring instruments, physics lab.	Students grasp measurement techniques.	Confusion in error calculations.	applications of mathematics in physics. Green Flag: Compare different unit systems. White Flag: Identify SI units. Red Flag: Discuss significance of precision in measurements.
Motion in a Straight Line	Understand displacement, velocity, acceleration.	Graphical analysis, motion equations.	Plot motion graphs.	Graph paper, physics simulations.	Students analyze motion patterns.	Difficulty in differentiating velocity and acceleration.	Green Flag: Solve kinematic equations. White Flag: Identify types of motion. Red Flag: Discuss real-life motion scenarios.
Motion in a Plane	Learn projectile motion, vectors, and relative velocity.	Vector analysis, practical demonstrations.	Conduct projectile motion experiments.	Physics models, simulations.	Students understand 2D motion.	Struggles with vector resolution.	Green Flag: Compare different types of projectile motion. White Flag: Define vector components. Red Flag: Discuss real-world applications of vectors.
Laws of Motion	Understand Newton's laws and their applications.	Force analysis, problem-solving.	Demonstrate inertia and friction.	Spring balance, pulleys.	Students grasp force and motion.	Confusion in third law applications.	Green Flag: Solve force equilibrium problems. White Flag: Identify action-reaction forces. Red Flag: Discuss implications of Newton's laws in daily life.
Work, Energy, and Power	Learn work-energy theorem, conservation of energy.	Practical demonstrations, numerical problem-solving.	Calculate work done in real situations.	Dynamometers, pendulums.	Students understand energy transformation.	Difficulty in work-energy relation.	Green Flag: Compare kinetic and potential energy. White Flag: Identify types of mechanical

System of Particles and Rotational Motion	Analyze motion of rigid bodies and rotational dynamics.	Experiments, torque analysis.	Study rotational equilibrium.	Rotational apparatus, physics lab.	Students understand moment of inertia.	Confusion in torque and angular momentum.	energy. Red Flag: Discuss conservation of energy examples. Green Flag: Solve rotational motion problems. White Flag: Identify key rotational motion equations. Red Flag: Discuss real-life examples of rotational motion.
Gravitation	Understand Newton's law of gravitation and planetary motion.	Orbital motion analysis, problem- solving.	Simulate gravitational force effects.	Gravity simulators, NASA models.	Students grasp gravitational force.	Difficulty in Kepler's laws applications.	Green Flag: Compare Earth's and Moon's gravity. White Flag: Identify factors affecting gravity. Red Flag: Discuss importance of gravitation in space exploration.
Mechanical Properties of Solids and Fluids	Learn elasticity, viscosity, fluid dynamics.	Practical experiments, case studies.	Study stress- strain behavior.	Springs, fluid containers.	Students understand material properties.	Confusion in Poiseuille's equation.	Green Flag: Compare different materials' elasticity. White Flag: Define stress and strain. Red Flag: Discuss applications of fluid mechanics.
Thermal Properties of Matter	Understand heat transfer, thermal expansion.	Experiments on conduction, convection, radiation.	Study expansion of solids and liquids.	Thermometers, calorimeters.	Students grasp thermal properties.	Difficulty in differentiating heat and temperature.	Green Flag: Compare different heat transfer methods. White Flag: Identify types of thermal expansion. Red Flag: Discuss applications of thermal properties.
Thermodynamics	Learn laws of thermodynamics and heat engines.	Case studies, heat engine analysis.	Study entropy changes.	Thermal engines, PV diagrams.	Students recognize	Confusion in entropy concept.	Green Flag: Compare heat engines. White Flag: Identify

					energy transfer		thermodynamic
					principles.		processes.
							Red Flag: Discuss
							real-life examples of
							thermodynamics.
Kinetic Theory of	Understand gas laws,	Simulations,	Study	Gas law	Students grasp	Struggles	Green Flag: Compare
Gases	kinetic theory	problem-	Maxwell's	models,	microscopic	with pressure-	real and ideal gases.
	postulates.	solving.	distribution.	physics	behavior of	volume	White Flag: Identify
				simulations.	gases.	relations.	gas law equations.
							Red Flag: Discuss
							significance of kinetic
							energy in gases.
Oscillations	Learn simple	Pendulum	Analyze	Spring-mass	Students	Difficulty in	Green Flag: Compare
	harmonic motion,	experiments,	motion of a	systems,	understand	phase	different types of
	damped oscillations.	wave	simple	graphs.	periodic	difference	oscillations.
		simulations.	pendulum.		motion.	concepts.	White Flag: Identify
							SHM parameters.
							Red Flag: Discuss
							damping and
							resonance effects.
Waves	Understand types of	Water wave	Demonstrate	Sound tubes,	Students grasp	Confusion in	Green Flag: Compare
	waves, wave speed,	experiments,	interference	ripple tanks.	wave	longitudinal	sound and light
	Doppler effect.	tuning forks.	and		mechanics.	and	waves.
			diffraction.			transverse	White Flag: Identify
						waves.	parts of a wave.
							Red Flag: Discuss
							applications of the
							Doppler effect.

MATHEMATICS

Chapter	Learning Outcomes	Pedagogy	Activities	Resources	Achievements	Gaps	Remedials
						Identified	
Sets	Understand set	Interactive	Venn	Textbooks,	Solve set	Difficulty	Practice Venn
	operations and apply	discussion,	Diagram	charts.	problems.	differentiatin	diagrams.
	in real life.	problem-	representatio			g sets.	
		solving.	n.				
Trigonometry	Learn trigonometric	Lecture,	Measure	Graph papers,	Apply	Difficulty	Practice basic
	functions and	derivations,	angles, solve	protractors.	identities in	memorizing	problems.
	identities.	applications.	problems.		problems.	formulas.	
Relation and	Analyze functions,	Graphical	Graph	Graph sheets,	Graph and	Confusion in	Practice graphing
Function	domain, and range.	representation.	functions,	software.	analyze	domain-	functions.
			mapping.		functions.	range.	

Linear Inequalities	Solve and apply inequalities.	Graphing and solving techniques.	Graph linear inequalities.	Graph sheets, markers.	Solve and graph inequalities.	Difficulty with notation.	Practice inequality notation.
Complex Numbers and Quadratic Equations	Understand imaginary numbers.	Algebraic manipulation.	Plot numbers on Argand plane.	Graph paper, tools.	Solve quadratic equations.	Confusion in imaginary unit.	Perform arithmetic operations.
Permutations and Combinations	Apply counting principles.	Factorial concepts, applications.	Arrange objects, solve problems.	Playing cards, sheets.	Apply counting effectively.	Difficulty differentiatin g methods.	Identify when to use permutations.
Binomial Theorem	Expand expressions using binomial coefficients.	Pascal's Triangle, expansions.	Expand polynomials.	Number charts, expressions.	Apply binomial expansion.	Confusion in coefficients.	Use Pascal's Triangle.
Sequence and Series	Analyze arithmetic and geometric progressions.	Formula derivation.	Solve sum problems.	Algebraic formulas, sheets.	Compute series sum.	Difficulty applying formulas.	Practice sum formulas.
Straight Lines	Derive line equations and understand slopes.	Graphical plotting.	Find distance, midpoint.	Geometry tools.	Use straight- line equations.	Understandin g slopes.	Graph straight lines.
Conic Sections	Explore circles, ellipses, etc.	Equation derivations.	Identify conic sections.	Graph papers, models.	Analyze conic sections.	Confusion in conic types.	Identify conic equations.
Three- Dimensional Geometry	Understand 3D coordinate systems.	3D plotting exercises.	Solve distance formula problems.	3D models, software.	Solve basic 3D problems.	Difficulty visualizing 3D.	Apply distance formula.
Limits and Derivatives	Learn calculus concepts.	Graphical interpretations.	Differentiate functions.	Graph paper, tables.	Compute derivatives.	Understandin g differentiatio n.	Apply limit formulas.
Statistics	Apply statistical measures.	Data collection, representation.	Conduct surveys.	Graph sheets, tools.	Calculate statistics accurately.	Interpreting data.	Compute basic statistics.
Probability	Understand probability rules.	Experimental exercises.	Toss coins, roll dice.	Coins, dice, charts.	Compute probability.	Understandin g distributions.	Apply probability formulas.

POLITICAL SCIENCE

Chapter	Learning Outcomes	Pedagogy	Activities	Resources	Achievements	Gaps	Remedials
						Identified	

Constitution: Why and How	Understand the importance and making of the Indian Constitution.	Debates, documentary analysis.	Study the Constituent Assembly debates.	Indian Constitution, historical records.	Students grasp constitutional significance.	Confusion in drafting process.	Green Flag: Compare different countries' Constitutions. White Flag: Identify key members of the Constituent Assembly. Red Flag: Discuss importance of constitutional amendments.
Rights in the Indian Constitution	Analyze fundamental rights and their significance.	Case law analysis, discussions.	Study landmark Supreme Court judgments.	Preamble	Students understand rights and freedoms.	Difficulty in linking rights to responsibiliti es.	Green Flag: Compare fundamental rights and duties. White Flag: Identify six fundamental rights. Red Flag: Discuss role of judiciary in protecting rights.
Elections and Representation	Understand the electoral system and representation in democracy.	Mock elections, debates.	Analyze Indian election processes.	Election Commission reports, voter guides.	Students grasp election procedures.	Confusion in proportional vs. first-past-the-post system.	Green Flag: Compare different electoral systems. White Flag: Identify functions of the Election Commission. Red Flag: Discuss importance of fair elections.
Executive	Learn about the role and functions of the executive.	Case studies, governance models.	Study powers of the President and Prime Minister.	political science books.	Students recognize executive authority.	Difficulty in distinguishin g executive roles.	Green Flag: Compare Indian and US executive systems. White Flag: Identify roles of executive members. Red Flag: Discuss impact of coalition governments on executive power.
Legislative	Understand the structure and	Debates, parliamentary procedures.	Analyze real parliamentary sessions.	Lok Sabha and Rajya	Students grasp law-making process.	Confusion in bicameralism concept.	Green Flag: Compare Rajya Sabha and Lok Sabha.

	functioning of Parliament.			Sabha proceedings.			White Flag: Identify legislative powers. Red Flag: Discuss importance of committees in legislation.
Judiciary	Analyze the role of the judiciary in democracy.	Mock trials, case law studies.	Study landmark court rulings.	Supreme Court judgments, legal texts.	Students understand judicial review.	Difficulty in distinguishin g judicial independence	Green Flag: Compare different judicial systems. White Flag: Identify powers of the Supreme Court. Red Flag: Discuss importance of PIL (Public Interest Litigation).
Federalism	Understand the division of powers between central and state governments.	Case studies, comparative analysis.	Study federal structure of India.	Case Study	Students recognize federal dynamics.	Confusion in concurrent and residual powers.	Green Flag: Compare Indian and US federalism. White Flag: Identify federal and unitary features. Red Flag: Discuss challenges to Indian federalism.
Local Government	Analyze the role and significance of local governance.	Field visits, surveys.	Study Panchayati Raj and municipalitie s.	Local governance reports, Gram Sabha proceedings.	Students grasp grassroots democracy.	Difficulty in understandin g decentralizati on.	Green Flag: Compare rural and urban local governance. White Flag: Identify powers of local bodies. Red Flag: Discuss impact of 73rd and 74th Amendments.
Constitution as a Living Document	Understand the adaptability of the Constitution.	Case studies, discussions.	Analyze amendments and judicial interpretation s.	Constitutional amendments, court rulings.	Students grasp constitutional flexibility.	Confusion in judicial activism vs. judicial overreach.	Green Flag: Compare flexible and rigid Constitutions. White Flag: Identify major constitutional amendments. Red Flag: Discuss role of the judiciary

The Philosophy of the Indian Constitution	Analyze the ideals enshrined in the Constitution.	Debates, textual analysis.	Study the Preamble in depth.	debate	Students grasp constitutional philosophy.	Difficulty in understandin g socialist, secularist principles.	in constitutional interpretation. Green Flag: Compare philosophical ideals across different constitutions. White Flag: Identify key values of the Preamble. Red Flag: Discuss importance of secularism in democracy.
Political Theory	Understand core political concepts like power, authority, legitimacy.	Theoretical discussions, group debates.	Study political ideologies and governance.	Political philosophy books, case studies.	Students grasp basic political thought.	Confusion in distinguishin g between ideologies.	Green Flag: Compare democracy and authoritarianism. White Flag: Identify types of political ideologies. Red Flag: Discuss impact of political philosophy on governance.
Freedom	Analyze the meaning and limitations of freedom.	Case studies, philosophical discussions.	Study different concepts of freedom.	Political theory books, human rights reports.	Students understand civil liberties.	Difficulty in linking freedom to equality.	Green Flag: Compare positive and negative liberty. White Flag: Identify key thinkers on freedom. Red Flag: Discuss contemporary issues related to freedom.
Equality	Learn about political, social, and economic equality.	Theoretical debates, data analysis.	Study affirmative action policies.	Government policies, social justice reports.	Students recognize importance of equality.	Confusion in equality vs. equity.	Green Flag: Compare different types of equality. White Flag: Identify laws promoting equality. Red Flag: Discuss impact of caste and gender on equality.

Social Justice	Understand the concept of justice in a democratic society.	Case studies, policy analysis.	Study impact of reservation policies.	Legal case files, social justice movements.	Students grasp social justice frameworks.	Difficulty in understandin g distributive justice.	Green Flag: Compare Rawls' and Ambedkar's views on justice. White Flag: Identify key policies for social justice. Red Flag: Discuss effectiveness of affirmative action policies.
Rights	Analyze different types of rights and their enforcement.	Human rights case studies, debates.	Study national and international rights frameworks.	UN Human Rights documents, legal texts.	Students understand significance of rights.	Confusion in natural vs. legal rights.	Green Flag: Compare civil, political, and socio-economic rights. White Flag: Identify fundamental rights. Red Flag: Discuss role of NHRC in human rights protection.
Citizenship	Learn about the meaning, rights, and duties of citizenship.	Comparative studies, debates.	Study different models of citizenship.	Government records, citizenship laws.	Students grasp responsibilities of citizens.	Confusion in naturalization and dual citizenship.	Green Flag: Compare Indian and global citizenship laws. White Flag: Identify different types of citizenship. Red Flag: Discuss role of active citizenship in democracy.
Nationalism	Understand the evolution and impact of nationalism.	Historical analysis, debates.	Study nationalist movements worldwide.	Freedom struggle records, political theory books.	Students recognize nationalist ideologies.	Difficulty in distinguishin g cultural and political nationalism.	Green Flag: Compare different types of nationalism. White Flag: Identify key nationalist movements. Red Flag: Discuss role of nationalism in modern politics.

HISTORY

Theme	Learning Outcomes	Pedagogy	Activities	Resources	Achievements	Gaps Identified	Remedials
Writing and City Life	Understand the rise of writing and urbanization in Mesopotamia.	Source-based analysis, discussions.	Study ancient cuneiform texts and city layouts.	Archaeologica l reports, historical documents.	Students recognize early urban societies.	Difficulty in linking writing to administratio n.	Green Flag: Compare early writing systems. White Flag: Identify features of Mesopotamian cities. Red Flag: Discuss role of trade in early city life.
An Empire Across Three Continents	Analyze the expansion and governance of the Roman Empire.	Case studies, map analysis.	Study political and economic structures of Rome.	Roman history books, archaeological sources.	Students grasp empire administration.	Confusion in understandin g decline of Rome.	Green Flag: Compare Roman and modern governance. White Flag: Identify key Roman emperors. Red Flag: Discuss reasons for Roman Empire's fall.
Nomadic Empire	Understand the Mongol Empire and its impact.	Comparative studies, documentary screenings.	Study Mongol military strategies.	Historical maps, biographies of Genghis Khan.	Students grasp Mongol expansion.	Difficulty in linking Mongol policies to trade.	Green Flag: Compare Mongol and other empires. White Flag: Identify major Mongol conquests. Red Flag: Discuss impact of Mongol rule on world trade.
The Three Orders	Analyze feudal society and its structure.	Role-plays, social structure diagrams.	Compare roles of clergy, nobility, and peasants.	Medieval history books, feudal law texts.	Students recognize medieval hierarchy.	Confusion in understandin g feudal obligations.	Green Flag: Compare feudalism in Europe and Japan. White Flag: Identify roles in medieval society. Red Flag: Discuss impact of feudalism on economy.
Changing Cultural Traditions	Understand Renaissance, humanism, and Reformation.	Art analysis, historical debates.	Study famous works of Renaissance artists.	Paintings, manuscripts, philosophy books.	Students grasp impact of cultural shifts.	Difficulty in linking science to humanism.	Green Flag: Compare Renaissance and medieval thought. White Flag: Identify key Renaissance figures.

							Red Flag: Discuss role of printing press in cultural change.
Path to Modernisation	Analyze the Industrial Revolution and political transformations.	Comparative case studies, economic analysis.	Study technological innovations and their impact.	Economic reports, factory records.	Students recognize industrial and social change.	Confusion in linking industrializati on to urbanization.	Green Flag: Compare pre-industrial and
Displacing Indigenous People	Understand European colonization and its effects on native societies.	Historical analysis, documentary reviews.	Study case studies of Native Americans and Australian Aborigines.	Colonial records, ethnographic studies.	Students grasp impact of displacement.	Difficulty in linking colonization to modern inequalities.	Green Flag: Compare different colonial policies. White Flag: Identify major indigenous groups affected by colonization. Red Flag: Discuss long-term consequences of displacement.

ACCOUNTANCY

Chapter	Learning Outcomes	Pedagogy	Activities	Resources	Achievements	Gaps Identified	Remedials
Accounting							
Introduction to Accounting	1. Understand the meaning and objectives of accounting. 2. Learn about the users of accounting information.	Lecture, Case studies	of financial data,	Textbook, Business Reports	the basics of	bookkeeping	Flag: Research on careers in accounting

Basic Accounting Terms	1. Learn essential accounting terminologies. 2. Apply these terms in financial statements.	Concept- based teaching, Practical exercises	life scenarios,	LLeythook	Mastery of accounting vocabulary	Difficulty in remembering terms	Red Flag: Flashcards White Flag: Pair work Green Flag: Writing short case studies using accounting terms
Theory Base of Accounting & Accounting Standards	1. Explain the need for accounting principles and standards. 2. Learn about Indian and international accounting standards.		IFRS, Debate on global	IHinancial	Awareness of accounting principles	Difficulty in understanding standardization	Red Flag: Infographics White Flag: Group discussions Green Flag: Research on real-life accounting cases
Bases of Accounting	1. Differentiate between cash and accrual accounting. 2. Analyze their impact on financial statements.		financial statements prepared using	Sample Financial	Understanding different accounting approaches		Red Flag: Visual representation White Flag: Hands-on activities Green Flag: Research on organizations using each method
Accounting Equation	equation and its components. 2. Learn how transactions	Equation- based learning, Practice worksheets	equations, Creating a	Textbook, Business	Mastery of fundamental accounting rules	Difficulty in maintaining balance in equations	Red Flag: Step-by-step guided practice White Flag: Group exercises Green Flag: Writing business case studies
Accounting Procedures - Rules of Debit & Credit	1. Understand the rules of debit and credit. 2. Apply these rules in	Role-play, Case-based learning	transactions in	NCERT Textbook, Accounting Software	Understanding dual-entry system	Confusion in applying the rules	Red Flag: Mnemonics for debit and credit rules White Flag: Peer learning activities Green Flag: Research on historical evolution of double-entry accounting

	journalizing transactions.						
Origin of Transactions	1. Learn how transactions originate. 2. Classify transactions into different categories.	Scenario- based learning, Case studies	transactions from real-	NCERT Textbook, Business Reports	Awareness of financial transactions	Difficulty in classifying transactions correctly	Red Flag: Simple classification tables White Flag: Practical exercises Green Flag: Writing case studies on financial transactions
Journal & Ledger	1. Understand the format and purpose of journals and ledgers. 2. Learn the process of recording transactions.	accounting	journals and	NCERT Textbook, Accounting Software	Understanding financial recording		Red Flag: Step-by-step ledger guides White Flag: Class discussions Green Flag: Research on automation in accounting
Cash Books, Other Books & GST	1. Explain different subsidiary books in accounting. 2. Learn about GST and its impact on transactions.	studies, Practical	Maintaining a cash book, Analyzing GST invoices	Government GST	Awareness of modern financial recording methods	Difficulty in distinguishing different subsidiary books	Red Flag: Visual flowcharts White Flag: Practical exercises Green Flag: Research on GST implementation in businesses
Bank Reconciliation Statement		problem- solving,	Solving BRS problems, Analyzing real bank statements	NCERT Textbook, Sample Bank Statements	Awareness of banking procedures	Errors in adjusting transactions	Red Flag: Step-by-step reconciliation guide White Flag: Group exercises Green Flag: Research on digital banking reconciliations
Trial Balance	balance. 2.	based learning,	trial balance for a given	LLeythook	Understanding financial accuracy	Difficulty in balancing trial balance	Red Flag: Practice worksheets White Flag: Group exercises Green Flag: Research on automated trial balance preparation

	through trial balance.						
Depreciation	1. Explain the concept and methods of depreciation. 2. Learn about asset valuation.	based	depreciation using different	NCERT Textbook, Business Reports	ISCCAT	applying	Red Flag: Formula cheat sheets White Flag: Group discussions Green Flag: Research on impact of depreciation on financial statements
Rectification of Errors	1. Identify and rectify errors in accounting records. 2. Learn the classification of errors.	Problem- solving, Case	sample records,	NCERT Textbook, Accounting Software	Understanding error detection	distinguishing	Red Flag: Classification tables White Flag: Group discussions Green Flag: Research on common accounting errors in real companies
Statements of Sole Proprietorship	1. Learn to prepare financial statements. 2. Understand adjustments in final accounts.	accounting	statements for	NCERT Textbook, Business Reports	financial	Difficulty in making adjustments	Red Flag: Simplified adjustment techniques White Flag: Group discussions Green Flag: Research on financial statements of real businesses
System - Incomplete Records	1. Explain single-entry accounting. 2. Analyze limitations of incomplete records.	Comparative analysis, Case studies	single-entry data into	NCERT Textbook, Business Simulations	Understanding financial limitations	Difficulty in reconstructing records	Red Flag: Step-by-step conversion exercises White Flag: Group discussions Green Flag: Research on businesses using single-entry accounting

BUISNESS STUDIES

PSYCHOLOGY

Chapter	Learning Outcomes	Pedagogy	Activities	Resources	Achievements	Gaps Identified	Remedials
What is Psychology?	Understand the definition, history, and	Lectures, discussions.	Research major branches of psychology.	Psychology textbooks, articles.	Students recognize the importance of psychology.	Difficulty in distinguishing psychology	Green Flag: Compare psychology with other sciences.
	scope of psychology.					from related fields.	White Flag: Define psychology and its

		branches. Red Flag: Discuss real-	
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CHAPTER	LEARNING OUTCOME	PEDAGOGY	ACTIVITIES	RESOURCE	ACHIEVEMENTS	GAPS IDENTIFIED	REMEDIALS
Nature & Purpose of Business	1. Understand the objectives and significance of business. 2. Analyze different types of economic activities.	Case studies, Discussion	activities, Writing a report	NCERT Textbook, Business Reports	Awareness of business fundamentals	between different economic	Red Flag: Simplified flowcharts White Flag: Group discussions Green Flag: Research on famous entrepreneurs
Forms of Business Organisation	organizations. 2. Analyze	Diagram- based explanation, Case studies	Comparing sole proprietorship, partnership, and corporations	NCERT Textbook, Business Case Studies	Understanding business structures	Difficulty in selecting the appropriate business form	Red Flag: Comparative tables White Flag: Group discussions Green Flag: Research on successful businesses in each category
Private, Public & Global Enterprises	Understand the	Real-life case studies, Discussion	Research on multinational corporations, Debate on privatization	NCERT Textbook, Economic Reports	Awareness of business ownership	Confusion in distinguishing different types	Red Flag: Infographics White Flag: Group discussions Green Flag: Research on government policies on privatization
Business Services	1. Identify types of business services. 2.	Explanation, Practical examples	business services, Writing	NCERT Textbook, Business Reports	Understanding service-based industries	Difficulty in classifying business	Red Flag: Classification charts White Flag: Practical exercises Green Flag: Research on digital service industries
Emerging Modes of Business	Explain digital and e- commerce	Case studies, Digital	Research on e- commerce companies,	NCERT Textbook,	Awareness of modern business operations	Difficulty in understanding	Red Flag: Visual guides White Flag: Group discussions

	trends. 2. Understand online business models.	business analysis	Creating a business model	Business Reports		e-commerce frameworks	Green Flag: Research on start-ups and online businesses
	1. Explain corporate social responsibility (CSR). 2. Understand ethical practices in business.	Debate, Case study analysis	Research on CSR initiatives, Writing a report on business ethics	NCERT Textbook, Company CSR Reports	Awareness of ethical business practices	Difficulty in recognizing unethical behaviors	Red Flag: Ethical case studies White Flag: Group discussions Green Flag: Research on companies with strong CSR practices
Sources of Business Finance	finance. 2.	Financial analysis, Discussion	Identifying sources of finance for businesses, Preparing financial reports	NCERT Textbook, Banking Reports	Awareness of financial management	Difficulty in choosing appropriate finance sources	Red Flag: Comparative flowcharts White Flag: Case studies Green Flag: Research on start-up funding options
Small Business & Enterprises	1. Understand the significance of small businesses. 2. Learn about government support programs.	Documentary analysis, Discussion	Research on small businesses, Writing a report on MSMEs		Awareness of entrepreneurial opportunities	Difficulty in understanding the challenges faced by small businesses	Red Flag: Infographics White Flag: Group discussions Green Flag: Research on successful small businesses
Internal Trade	1. Explain different types of internal trade. 2.	Case studies, Role-play	Conducting a mock trade fair, Writing a report on retail markets	NCERT Textbook, Trade Reports	Awareness of trade structures	Difficulty in differentiating wholesale and retail trade	Red Flag: Visual comparison charts White Flag: Hands-on trading activities Green Flag: Research on major retail chains
International Business	1. Understand globalization and international trade policies.	Case studies, Discussion	Research on global trade agreements, Writing a report	NCERT Textbook, World Trade Reports	Awareness of global trade dynamics	Difficulty in grasping complex trade regulations	Red Flag: Simplified trade policies White Flag: Group discussions Green Flag: Research on

	2. Analyze the impact of international business on the economy.		on multinational corporations				trade relations between countries
Methods of Enquiry in Psychology	Learn about psychological research methods and ethics.	Case studies, experiments.	Conduct a simple psychological experiment.	Research papers, experiment kits.	Students understand data collection in psychology.	Confusion in qualitative vs. quantitative methods.	life applications of psychology. Green Flag: Compare different research designs. White Flag: Identify steps in psychological research. Red Flag: Discuss ethical concerns in psychological studies.
The Bases of Human Behaviour	Analyze biological and socio-cultural influences on behavior.	Neuroscience -based discussions, video analysis.	Study brain functions related to behavior.	Brain models, MRI scans, case studies.	Students grasp the link between biology and behavior.	Difficulty in understanding neural mechanisms.	Green Flag: Compare the nervous and endocrine systems. White Flag: Identify major parts of the brain. Red Flag: Discuss genetic and environmental factors.
Human Development	Understand stages of physical, cognitive, and social development.	Development al psychology studies, discussions.	Analyze lifespan changes in individuals.	Childhood development charts, video documentarie s.	Students recognize developmental milestones.	Confusion in distinguishing theories of development.	Green Flag: Compare Piaget and Erikson's theories. White Flag: Identify major developmental stages. Red Flag: Discuss impact of environment on development.
Sensory, Attentional, and Perceptual Processes	Understand sensory organs, perception, and attention.	Sensory experiments, illusions.	Conduct a perception-based experiment.	Optical illusions, reaction time tests.	Students grasp how we interpret stimuli.	Difficulty in understanding perceptual organization.	Green Flag: Compare different sensory modalities. White Flag: Identify major perceptual principles. Red Flag: Discuss reallife implications of perception errors.

Learning	Analyze classical, operant, and observational learning.	Behavioral experiments, reinforcemen t tasks.	Simulate conditioning experiments.	Pavlov's conditioning models, learning case studies.	Students understand learning theories.	Confusion in distinguishing learning mechanisms.	Green Flag: Compare reinforcement and punishment. White Flag: Identify key theories of learning. Red Flag: Discuss applications of conditioning in daily life.
Human Memory	Understand types, models, and processes of memory.	Memory recall exercises, discussions.	Test short-term and long-term memory.	Memory games, cognitive research papers.	Students recognize memory processes.	Difficulty in differentiating memory systems.	Green Flag: Compare different models of memory. White Flag: Identify types of memory. Red Flag: Discuss strategies to enhance memory retention.
Thinking	Analyze problem- solving, reasoning, and decision- making.	Cognitive experiments, case studies.	Solve real-life problem scenarios.	Problem- solving tasks, logical puzzles.	Students develop critical thinking skills.	Confusion in deductive vs. inductive reasoning.	Green Flag: Compare different types of thinking. White Flag: Identify cognitive biases. Red Flag: Discuss impact of emotions on decision-making.
Motivation and Emotion	Understand theories of motivation and emotions.	Case studies, motivation- based activities.	Analyze real-life examples of motivation.	Psychologica 1 motivation studies, emotional regulation exercises.	Students grasp emotional and motivational influences.	Difficulty in linking motivation to behavior.	Green Flag: Compare intrinsic and extrinsic motivation. White Flag: Identify major theories of emotion. Red Flag: Discuss role of emotional intelligence in daily life.

SOCIOLOGY

Chapter	Learning	Pedagogy	Activities	Resources	Achievements	Gaps	Remedials
	Outcomes					Identified	
Sociology,	Understand the	Lectures,	Debate on	Sociology	Students recognize	Difficulty in	Green Flag: Compare
Society	nature and	discussions.	relevance of	textbooks,	importance of	differentiating	sociology with
•	scope of		sociology in	articles.	sociology.	sociology	anthropology and political
	sociology.		modern times.				science.

						from related disciplines.	White Flag: Define sociology and its scope. Red Flag: Discuss realworld applications of sociology.
Terms, Concepts, and Their Use in Sociology	Learn key sociological concepts like status, role, norms.	Case studies, conceptual analysis.	Apply sociological terms to real-life scenarios.	Sociology dictionaries, research papers.	Students understand fundamental sociological terms.	Confusion in using sociological terminology correctly.	Green Flag: Compare different sociological perspectives. White Flag: Identify key sociological terms. Red Flag: Discuss impact of norms and values on society.
Understandin g Social Institutions	Analyze family, economy, polity, religion, and education.	Comparative studies, field research.	Examine real- world examples of social institutions.	Sociological journals, research papers.	Students recognize structure and function of institutions.	Difficulty in differentiating formal and informal institutions.	Green Flag: Compare family structures across cultures. White Flag: Identify major social institutions. Red Flag: Discuss changing role of institutions.
Culture and Socialization	Understand cultural diversity and socialization processes.	Ethnographic studies, group discussions.	Analyze impact of media on socialization.	Documentari es, cultural anthropology books.	Students grasp role of culture in shaping identity.	Confusion in distinguishing norms, values, and beliefs.	Green Flag: Compare different socialization agents. White Flag: Identify components of culture. Red Flag: Discuss globalization's impact on culture.
Social Change and Social Order in Rural and Urban Society	Analyze factors influencing social change and order.	Case studies, documentary screenings.	Study rural- urban differences in modernization.	Government reports, census data.	Students understand processes of social change.	Difficulty in linking modernization to cultural change.	Green Flag: Compare social change in rural vs. urban societies. White Flag: Identify factors driving social change. Red Flag: Discuss impact of technology on society.
Introducing Western Sociologists	Study contributions of Marx, Weber, and Durkheim.	Theoretical analysis, discussions.	Apply classical theories to contemporary society.	Sociology classics, research papers.	Students recognize influence of classical sociologists.	Difficulty in applying sociological theories.	Green Flag: Compare Marx, Weber, and Durkheim. White Flag: Identify key sociological theories. Red Flag: Discuss

							relevance of classical theories today.
Indian Sociology	Understand contributions of Indian sociologists like Ghurye and Srinivas.	Research- based learning, comparative studies.	Analyze caste and social stratification in India.	Indian sociology books, case studies.	Students grasp Indian sociological perspectives.	Confusion in distinguishing classical and contemporary Indian sociology.	Green Flag: Compare caste and class in India. White Flag: Identify contributions of key Indian sociologists. Red Flag: Discuss impact of globalization on Indian society.

PAINTING

Chapter	Learning	Pedagogy	Activities	Resources	Achievements	Gaps	Remedials
	Outcomes	Used				Identified	
Ch-1:	1. Understand	Lecture,	1. Visual	Images of	Students will	Difficulty in	Red Flag: Extra explanation with visual
Prehistoric	the	Visual Aids,	analysis of	cave	recognize early	relating	aids.
Rock	significance of	Discussion	prehistoric cave	paintings,	art forms and	prehistoric art	White Flag: Group discussion on cave
Paintings	prehistoric art.		paintings.	Clay, Tools	their cultural	to modern	paintings.
and Art of	2. Identify		2. Clay		significance.	times.	Green Flag: Research and presentation
Indus	features of		modeling of				on prehistoric art forms worldwide.
Valley	Indus Valley		Indus Valley				
	art.		seals.				
Ch-2:	1. Compare	Storytelling,	1. Comparing	PPTs,	Students will	Complexity in	Red Flag: Simplified handouts with key
Buddhist,	artistic styles in	PPT	different	Sculpture	identify	understanding	points.
Jain, and	Buddhist, Jain,	Presentation,	sculptures	Images	differences and	abstract	White Flag: Pair work for analyzing
Hindu Art	and Hindu art.	Group	through		similarities in	symbolism.	sculptures.
	2. Analyze the	Discussion	pictures.		these art		Green Flag: Writing an essay on artistic
	symbolism in		2. Group		forms.		similarities and differences.
	religious		discussions on				
	sculptures.		religious				
			symbolism.				
Ch-3:	1. Study the	Field Visits,	1. Sketching	Site visits,	Ability to	Limited access	Red Flag: Extra video lectures on
Temple	evolution of	Case Studies,	temple	Sketching	differentiate	to real-life	architecture.
Sculpture,	temple	Videos	structures.	materials,	architectural	structures for	White Flag: Identifying architectural
Bronze, and	sculptures.		2. Comparative	Documentary	elements of	deeper	elements in pictures.
Indo-Islamic	2. Understand		study of temple		different	learning.	Green Flag: Writing a report comparing
Architecture	Indo-Islamic		and Indo-		periods.		two architectural styles.
	architectural		Islamic				
	features.		architecture.				

Ch-4: Artistic Aspect of Indian Temple	1. Understand artistic elements in Indian temples. 2. Examine different temple styles across India.	Visual Aids, Lecture, Discussion	1. Drawing different temple styles. 2. Presentation on famous temples.	Reference books, Temple images	Awareness of diverse temple architecture styles.	Difficulty in memorizing detailed architectural styles.	Red Flag: Flashcards with temple features. White Flag: Labeling temple elements in pictures. Green Flag: Making a 3D model of a temple.
Ch-5: Descent of Ganga, Trimurti	1. Interpret the story behind the Descent of Ganga and Trimurti. 2. Understand the sculptural techniques used.	Narratives, Video Analysis, Art Criticism	1. Watching a documentary on Mahabalipuram sculptures. 2. Discussion on the Trimurti concept.	Documentary, Sculpture images	Students will connect mythology with sculpture.	Lack of deeper engagement with cultural narratives.	Red Flag: Storytelling with visuals. White Flag: Writing a short summary of the story. Green Flag: Explaining how mythology influences sculpture.
Ch-6: Lakshmi Narayana	1. Understand the symbolism of Lakshmi Narayana. 2. Analyze the artistic representation in sculptures.	Storytelling, Lecture, Discussion	1. Identifying Lakshmi Narayana depictions in different temples. 2. Debate on artistic variations.	Sculpture images, Temple references	Students will appreciate religious and artistic significance.	Difficulty in grasping symbolic elements.	Red Flag: Watching animated videos on Lakshmi Narayana. White Flag: Group discussion on its significance. Green Flag: Research and presentation on variations in different regions.
Ch-7: Mother and Child	1. Explore the theme of Mother and Child in Indian art. 2. Analyze different artistic interpretations.	Visual Analysis, Creative Activities	1. Creating an artwork based on the theme. 2. Presentation on different artistic representations.	Art supplies, Sculpture images	Understanding of emotional depth in Indian art.	Difficulty in expressing artistic interpretations.	Red Flag: Simple coloring activity on Mother and Child theme. White Flag: Writing a paragraph on its symbolism. Green Flag: Creating an original artwork inspired by the theme.

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Chapter	Chapter	Learning	Pedagogy	Activities	Resources	Achievements	Gaps Identified	Remedial
No.	Name	Outcomes	Used					S

Ch-1		000000 0,0000-	चन, 		Red Flag: White Flag: Green Flag: Green
Ch-2					Red Flag: White Flag: Green Flag:
Ch-3					Red Flag:

Ch-4		∀			Red Flag:
Ch-5					Red Flag:
Ch-6		पण	 न		Red Flag:

					Green Flag:
Ch-7					Red Flag:
Ch-8					Red Flag: White Flag: Green Flag: Green
Ch-9		 чи न			Red Flag: OHERON STATE OF THE

				Green Flag:
Ch-10	श			Red Flag:
Ch-11	田 ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・	खन		Red Flag: White Flag: Green Flag: Green
Ch-12				Red Flag:

						Green Flag:
Ch-13	गजल		न	रह		Red Flag:
Ch-14	मचल मचल			 ययन		Red Flag:
Ch-15			ण			Red Flag:

					White Flag: Green Flag:
Ch-16	ण			् 	Red Flag:
Ch-17		रवणऔर 🗆			Red Flag: White Flag: Green Flag: Green

Ch-18					Red Flag:
Ch-19			000-		Green Flag: Red Flag:
		V			White Flag: Green Flag:
Ch-20	H				Red Flag: White Flag: Green Flag:

Ch-21						Red Flag:
Ch-22	खन	खन	स			Red Flag: White Flag: Green Flag:
Ch-23		तर ।				Red Flag:

				Green Flag:

CHEMISTRY

Chapter Name Learning **Pedagogy** Activities **Achievements Gaps** Remedials Resources **Identified Outcomes** Students will Red Flag: Extra Some Basic 1. Explain the Lecture, Mole concept Textbook. Difficulty in Concepts of importance of Discussion, Online be able to quiz, Group practice unit chemistry in daily simulation Chemistry Problemdiscussion on relate conversions worksheets on solving method role of chemistry for mole chemistry to and applying life. mole concept. 2. Apply mole in society White Flag: concept real-life formulas. concept and solve applications Group numerical and solve basic discussions and stoichiometric problems. peer tutoring problems. sessions. Green Flag: Advanced numerical problem-solving and researchbased assignments. 1. Describe atomic Explanation Students will Structure of Atomic model Visual aids, Confusion in Red Flag: using models models and their chart-making Online be able to understanding Simplified Atom limitations. and diagrams activity, Quiz on videos on explain the orbital shapes diagrams and 2. Explain the atomic structure of and electron visual aids. quantum concept of configurations. White Flag: numbers theory atom and Worksheets on quantum numbers. understand atomic models quantum and quantum numbers. numbers. Green Flag: Extended reading on modern atomic theories and

							related research work.
Classification of Elements and Periodicity in Properties	1. Explain periodic trends in properties of elements. 2. Classify elements into s, p, d, f blocks.	Interactive lecture, Concept mapping	Periodic table puzzle, Group discussion on trends across periods and groups	Periodic table chart, Online periodic table tools	Students will understand the classification of elements and trends across periods and groups.	Difficulty in correlating trends with atomic structure.	Red Flag: Simplified periodic table with key trends highlighted. White Flag: Concept map creation and regular quizzes. Green Flag: Trend analysis project and presentations.
Chemical Bonding and Molecular Structure	1. Explain different types of chemical bonds. 2. Apply VSEPR theory to predict molecular shape.	Group discussion, Demonstrations	Model-making of molecular structures, Bond type identification activity	Molecular model kit, Videos on VSEPR theory	Students will understand different bonds and predict molecular geometry.	Difficulty in understanding hybridization and bond angles.	Red Flag: Extra practice on bond formation and interactive animations. White Flag: Group discussions on bond properties. Green Flag: Case study on molecular geometry in biological systems.
Chemical Thermodynamic s	1. Explain laws of thermodynamics. 2. Solve numerical problems based on enthalpy, entropy, and Gibbs energy.	Problem- solving, Concept explanation	Thermochemistry experiments, Numerical practice sessions	Lab manuals, Simulation tools	Students will understand thermodynamic concepts and apply them in numerical problems.	Conceptual clarity on spontaneous and non-spontaneous processes is low.	Red Flag: Simplified flowcharts for laws of thermodynamics. White Flag: Group-solving of thermodynamic numericals. Green Flag:

							Real-world application project on thermodynamics (e.g., engines, environment).
Equilibrium	1. Explain dynamic nature of equilibrium. 2. Apply Le Chatelier's principle to predict changes in equilibrium.	Demonstration, Lecture	Experiment on chemical equilibrium, Case study discussion on real-life equilibrium examples	Laboratory resources, Case studies	Students will understand equilibrium and factors affecting it.	Difficulty in applying Le Chatelier's principle in numerical questions.	Red Flag: Stepwise explanation using simple examples. White Flag: Case study discussions and practice sheets. Green Flag: Research presentation on equilibrium in industrial processes.
Redox Reactions	Define oxidation and reduction. Balance redox reactions using different methods.	Explanation and practice sessions	Redox reaction balancing competition, Real-life redox examples discussion	Worksheets, Visual presentations	Students will understand oxidation-reduction processes and balance equations.	Difficulty in balancing complex reactions.	Red Flag: Practice balancing simple reactions. White Flag: Group work on reaction identification and balancing. Green Flag: Application- based project on redox in biological or industrial systems.
Organic Chemistry: Some	1. Explain classification and nomenclature of	Concept mapping,	Nomenclature practice quiz, Functional group	Flashcards, Online organic	Students will be able to name and	Difficulty in IUPAC naming	Red Flag: Functional group identification

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Basic Principles	organic	Interactive	identification	molecule	classify	conventions	practice using
and Techniques	compounds.	lecture	activity	builder	organic	and	visual aids.
	2. Identify and				compounds.	identifying	White Flag:
	differentiate					functional	Group practice
	functional groups.					groups.	on nomenclature
							and
							classification.
							Green Flag:
							Advanced
							assignments on
							multi-functional
							compounds.
Hydrocarbons	1. Explain	Lecture,	Reaction	Reaction	Students will	Confusion in	Red Flag:
	properties and	Diagram-based	mechanism	charts,	understand	distinguishing	Stepwise
	reactions of	explanation	roleplay,	Videos on	types of	between	reaction
	alkanes, alkenes,		Comparison	organic	hydrocarbons	reaction	mechanism
	and alkynes.		table-making	reactions	and their	mechanisms.	explanation
	2. Differentiate		activity		reactions.		using
	between addition						animations.
	and substitution						White Flag:
	reactions.						Practice
							worksheets on
							types and
							reactions of
							hydrocarbons.
							Green Flag:
							Research
							assignment on
							hydrocarbons in
							petroleum and
							polymers.