## ST ALOYSIUS GONZAGA SCHOOL, MANGALURU

### ANNUAL SYLLABUS PLAN 2024-25

## CLASS: XII

# **TEACHER: Ms Tanuja Domber**

## SUBJECT: English

Month	No. of Periods	Lesson	Title of the Lesson	Teaching Methods	Activities	Learning Objectives
April	3	1	The Last Lesson	Traditional method	<ul> <li>* Values of freedom and individual identity.</li> <li>* Students should value what their teachers teach</li> </ul>	The students will be able to: *know the importance of mother tongue. *understand the wastefulness of war. *understand linguistic chauvinism.
	2	Poetry 1	My Mother at Sixty-Six	Moral approach	* Poetic Devices * Poetry structure and rhymes	The students will be able to: *understand and share the loneliness of aged. *understand the importance of our duties towards the elderly people.
	4	Vistas 1	The Third Level	Traditional method	<ul> <li>* Students should value reality.</li> <li>* Learning human psychology</li> </ul>	The students will be able to: *understand the contrast between the fantasy world and real world.
			Per	riodic Test 1: 1	6-04-2024 to 20-04-2024	
June	2	Poetry 2	Keeping Quiet	Moral approach	* Importance of meditation Students will be asked to remain completely silent in meditation Then they will be asked how exotic this stillness was and were they able to do.	The students will be able to: *understand that introspection makes us find our flaws and give us the opportunity to rectify them. *think critically, understand not to harm others, remain quiet and still be productive and active.

	5	Vistas 2	The Tiger King	Moral approach	<ul> <li>* Video on Royal Bengal Tiger</li> <li>* Discussion about wild life and extinction of tigers</li> </ul>	The students will be able to: *understand that there is a need of a new system for the age of ecology i.e., a system which is embedded in the care of all people and also in the care of the Earth and all life upon it.
	4	2	The Rattrap	Discussion method	* How many of you watch Tom and Jerry show? – Group Discussion	The students will be able to: *become compassionate and helpingdevelop a flair for reading different genre. *understand everybody must get a chance to undo the wrong he did.
July	2	Poetry 3	A Thing of Beauty	Moral- philosophical approach	* Do we experience things of beauty only for short moments or do they make a lasting impression on us? – Debate	The students will be able to: *to understand that beauty dwells inside us and gives us happiness. *to appreciate and admire the beauty of nature.
	3	Vistas 3	Journey to the end of the Earth	Information based	<ul> <li>* Why do people go for expedition? – Think, Pair, Share</li> <li>* Video Presentation on Antarctica'.</li> </ul>	The students will be able to: *understand that to study the Earth's past, present and future, Antarctica is the place – the World's geological history is in Antarctica. *analyse and evaluate the effect of human population and climate change.
			Per	riodic Test 2: 18	8-07-2024 to 29-07-2024	
August	5	3	Indigo	Information based	* Investigatory Project	The students will be able to: *understand the role of a leader. *understand the importance of rights. *know the sufferings and contributions of freedom fighters.
	4	4	Poets and Pancakes	Information based	* A class room discussion based on – Today's film technology compared with	The students will be able to: *analyse the working conditions and people involved in the studios.

					that of the early days of Indian cinema.	*understand the use of talent and creativity at its best.
	3	Poetry 4	A Roadside Stand	Information based	* The economic wellbeing of a country depends on a balanced development of the villages and the cities – Group Discussion	The students will be able to: *understand the contrast between the lives of rich and poor. *understand that the economic well-being of a country depends on a balanced development of the villages and the cities.
September	7	Vistas 4	The Enemy	Moral approach	* Debate on-Should we hate our enemy if he is in the death trap or should we save?	The students will be able to: *realize that war and narrow – nationalism can shuffle human feeling of love and compassion and turn friends and fellow human beings into enemies.
	4	5	The Interview	Information based	<ul> <li>* Warm up activity How should one prepare for the interview?</li> <li>* Excerpts from the interviews of famous personalities</li> </ul>	The students will be able to: *understand that the interview holds a position of unprecedented power and influence. *learn the Analytical skills, Thinking skills, Observatory skills, Interviewing skills.
	3	Poetry 5	Aunt Jennifer's Tigers	Traditional method	<ul> <li>* Do we experience things of beauty only for short moments or do they make a lasting impression on us?</li> <li>– Think, Pair, Share</li> <li>* PPT will be shown for retaining literary devices.</li> </ul>	*understand that man and woman are equal. *understand that females even have inherent desires and they deserve freedom: mental and emotional both.
		• •	Pe	riodic Test 3: 2	3-09-2024 to 01-10-2024	•
October	4	Vistas 5	On the Face of It	Moral approach	* Video presentation based on physically handicapped people will be shown to the students to relate with the lesson.	The students will be able to: *gain insight into the loneliness of physically handicapped.
	4	6	Going Places	Discussion method	* Discuss about your favourite game.	The students will be able to: *to compare their world of fantasy and reality. *to understand that there is no substitute to hard work.

					* Brainstorming activity - List the countries known for football fever.	*to accept the reality in life and responsibility in the family.		
November	4	Vistas 6	Memories of Childhood • The Cutting of My Long Hair • We Too are Human Beings	Information based	* Narrate an incident from the history which tells us about untouchability. discrimination/social injustice	The students will be able to: *learn how to respect people from different culture. *voice for injustice and discrimination.		
Revision Classes Pre-Board 1: 21-11-2024 to 02-12-2024 Pre-Board 2: 23-01-2025 to 01-02-2025								

## CLASS: XII

## **TEACHER: Ms Sushmita Rachel Pinto**

### **SUBJECT: Mathematics**

Month	No. of	Lesson	Title of the	Teaching	Activities	Learning Outcomes
	Periods	No.	Lesson	Methods		
April	30	05	Continuity and	Discussion	*To write the derivative of	The students will be able to:
			differentiability	method	inverse trigonometric	*explain the chain rule.
				Demonstration	functions like	*solve for the logarithmic functions and exponential
				Problem	$sin^{-1}x, cos^{-1}x$	functions.
				Solving	and $tan^{-1}x$	
			P	eriodic Test 1: 1	.6-04-2024 to 20-04-2024	
June	15	01	Relations and	Activity based	*Group Discussion - To	The students will be able to:
			Functions	Problem	know the difference	*identify reflexive, transitive, symmetric and
				Solving	between the relations and	equivalence relations.
					functions with the help of	
					arrow diagrams.	
	14	02	Inverse	Demonstration	*Quiz	The students will be able to:
			Trigonometric	Problem		*define the range and domain of inverse
			Functions	solving		trigonometric function.
						*draw the graph of a inverse trigonometric
Tl	12	02	Matrices	Diamatica	*Concert More To conclu	The stephene will be able to:
July	13	03	Matrices	Discussion	*Concept Map - To apply	I he students will be able to:
				Drohlom	and multiplication on	*anterentiate between diagonal and scalar matrices.
				Solving	matrices	*perform the operations on matrices.
				Solving	*Identify the different	
					types of matrices	
					types of matrices.	

	12	04	Determinants	Demonstration method Problem Solving	*To find out the determinant of a matrix. *Worksheet - To solve the inverse of a matrix using	The students will be able to: *differentiate between the minors and co-factors of a matrix. *solve linear equations in the form of matrices.					
					its determinant and adjoint of a matrix.						
	Periodic Test 2: 18-07-2024 to 29-07-2024										
August	13	06	Applications of Derivatives	Activity based method Problem Solving method	*To find out the maxima and minima of an inverse function.	The students will be able to: *compares the rate of change of quantities *perform on increasing and decreasing inverse function.					
	05	07	Integrals	Demonstration Problem solving	*List down all the formulae related to integrals.	The students will be able to: *solve the properties on integrals. *calculate on the evaluation of definite integrals.					
	15	07	Integrals	Problem solving Discussion method	*List down all the formulae related to integrals.	The students will be able to: *solve the properties on integrals. *perform on the evaluation of definite integrals.					
September	07	08	Applications of integrals	Problem Solving Discussion Method	*Find out the area using integrals.	The students will be able to: *solve for the area under simple curves and between two curves.					
	15	09	Differential Equations	Discussion Method Demonstration Method	*List out all the formulae under differentiation.	The students will be able to: *differentiate between differentiation and integration. *identify the order and degree of an equation.					
			I	Periodic Test 3: 2	3-09-2024 to 01-10-2024						
October	10	10	Vector Algebra	Demonstration Discussion Activity based	*Differentiate between different types of vectors.	The students will be able to: *explain the addition and subtraction on vectors. *calculate the product of two vectors.					
	11	11	Three - dimensional Geometry	Demonstration Activity based	*Concept Map *Identify the shortest distance between two lines.	The students will be able to: *derive the equation of a line in space. *calculate the angle between two planes.					

				Problem				
				Solving				
November	08	12	Linear	Demonstration	*Concept map	The students will be able to:		
			Programming	Activity based	*Shows the relation	*solve the different type linear programming		
				method	between linear	problems.		
					programming and its			
					relation.			
	13	13	Probability	Discussion	*Explains conditional	The students will be able to:		
				Method	probability.	*prove Baye's theorem.		
				Problem		*inter-relate multiplication theorem on probability.		
				Solving				
Revision Classes								
				Pre-Board 1: 21	-11-2024 to 02-12-2024			
				Pre-Board 2: 23	-01-2025 to 01-02-2025			

## CLASS: XII

## **TEACHER: Ms. Shruthi S**

# **SUBJECT: Physics**

Month	No. of	Lesson	Title of the	Teaching	Activities	Learning Outcomes
	Periods	No.	Lesson	Methods		
April	08	01	Electric Charges and Fields	*Lecture cum Discussion method *Power Point Presentation	Brainstorming activity for the topic of electric charges and fields. Lab Activity	The students will be able to: *develop the idea of electric charges and its importance. *explain the properties of electric charge and fields. *recognize the applications of Gauss law in electrostatics.
	12	02	Electrostatic Potential and Capacitance	*Power point presentation *Problem solving *Group discussion	Lab activity Quiz Concept map of capacitors in series and parallel.	The students will be able to: *demonstrate the importance of potential and capacitance using experiments. *compare the series and parallel combinations of capacitors. *define dielectric polarization, polar and non-polar molecules.
			]	Periodic Test 1: 10	5-04-2024 to 20-04-2024	
June	04	10	Nuclei	*Discussion method *Power point presentation	Muddiest and clearest point Evaluation	The students will be able to: *explain mass-energy relationship. *distinguish between nuclear fusion and nuclear fission.
	10	03	Current Electricity	*Activity Based *Problem solving	Group discussion method Finger signals Clarification pauses Lab activity	The students will be able to: *define current, drift velocity, mobility and resistance etc., *list the limitations of Ohm's law. *demonstrate experiments on series and parallel connections.

	12	04	Moving Charges	*Discussion	Think pair share	The students will be able to:
			and Magnetism	*Activity Based	Debate	* learn about the concepts of magnetic field and its
				*Problem	Debate	*differentiate between BiotSavart and Ampere's
				Solving		Circuital law.
				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		*explain about current sensitivity with respect to
						moving coil galvanometer.
July	04	04	Moving Charges	*Discussion	Think pair share	The students will be able to:
			and Magnetism	method	_	* learn about the concepts of magnetic field and its
			_	*Activity Based	Debate	related experiments.
				*Problem		*differentiate between BiotSavart and Ampere's
				Solving		Circuital law.
						*explain about current sensitivity with respect to
						moving coil galvanometer.
	02	05	Magnetism and	*Activity based	Muddiest/clearest point	The students will be able to:
			Matter	*Discussion		*list out different types of magnetic materials.
				method		*identify the properties of magnetic materials.
				*Demonstration		
	10	06		method		
	12	06	Electromagnetic	*Power point	Panel discussion	The students will be able to:
			Induction	*Discussion	Work at the blackboard	Lenz's law
				*Discussion mothod	work at the blackboard	Lenz s law.
				*Activity based	One minute paper	induction
				Activity based	One minute paper	induction.
			]	Periodic Test 2: 18	8-07-2024 to 26-07-2024	
			Alternating	*Power point	Group discussion method	The students will be able to:
August	08	07	Current	presentation		*explain AC generator and transformer through its
8				*Discussion		principles.
				method		*define rms value ac current etc.,
				*Activity based		*solve problems on impedance.

	06	08	Electromagnetic Waves	*Demonstration method *Activity based *Power point presentation *Problem solving	Quiz Clarification pauses	The students will be able to: * list out the properties of Electromagnetic waves. *prepare concept map for types of electromagnetic waves. *define displacement current.
	06	09	Ray Optics	*Lab Activity	Demonstration method	The students will be able to: *construct ray diagrams using concepts of optics.
September	6	09	Ray Optics (Continued)	*Power point presentation *Problem solving	Quiz One minute paper Lab Activity	The students will be able to: *learn about types of mirrors and lenses and its importance.
	8	10	Wave Optics	*Lab activity *Activity based *Problem Solving	Muddiest point Reading quiz Reciprocal questioning	The students will be able to: * learn about Huygens's principle on reflection and refraction. *explain concepts of interference and diffraction.
	6	11	Dual nature of matter and Radiation	*Activity based *Problem solving	Think pair share Debate	The students will be able to: *identify observations of photoelectric effect by different scientists. *judge de-Broglie's relation.
	4	12	Atoms	*Discussion method *Activity based *Problem Solving *Lab activity	Quiz One minute paper Pros and cons grid	The students will be able to: *explain alpha scattering and Rutherford's experiment. *solve problems on hydrogen line spectra. *choose right formulas for the energy relation.
			]	Periodic Test 3: 2.	3-09-2024 to 01-10-2024	
October	2	12	Atoms (continued)	*Discussion method *Activity based *Problem	Quiz One minute paper	The students will be able to: *explain alpha scattering and Rutherford's experiment. *solve problems on hydrogen line spectra.

				Solving *Lab activity	Pros and cons grid	*choose right formulas for the energy relation.		
	10	14	Semiconductor Electronics	*Demonstration method *Activity based *Problem Solving *Lab activity	Quiz Projects Panel discussion	The students will be able to: *list out the different materials of semiconductors. *analyze the importance of energy band in conductors, insulators and semiconductors.		
Revision Classes Pre-Board 1: 21-11-2024 to 02-12-2024 Pre-Board 2: 23-01-2025 to 01-02-2025								

## CLASS: XII

# TEACHER: Ms Lavanya R Shetty SUBJECT: Chemistry

MONTH	No. of	Lesson	Title of the	Teaching	Activities	Learning outcomes
	periods	No.	chapter	methodology		
April	13	1	Solutions	*Discussion	*Preparation of solution of	The student will be able to:
				method	given concentration	*distinguish between ideal and non-ideal
						solutions.
				*Activity method	*Concept map	*explain deviations of real solutions from
						Raoults law.
	16	4	Chemical Kinetics	*Inductive	*Plotting of the graph for	The student will be able to:
				method	first order reaction	*express the rate of reaction in terms of change
				*Problem solving	*Concept map	in concentration of either of the reactants or
				method		products with time.
					* Black board work	*differentiate between molecularity and order of
				* Power Point		the reaction.
				Presentation		The student will be able to:
						*describe collision theory.
	Γ	Γ	· · · · · · · · · · · · · · · · · · ·	Periodic Test 1: 16/	4/2024 to 20/4/2024	1
June	10	6	Haloalkanes and	*Lecture method	*One minute paper	The student will be able to:
			Haloarenes			*describe the reactions involved in the
				*Power point	*Write the structures of	preparation of haloalkanes and Haloarenes.
				presentation	different compounds	*name haloalkanes and haloarenes according to
						IUPAC nomenclature.
	10	2	Electrochemistry	* A polytical	*0	The student will be able to:
	10	Z	Electrochemistry	*Allalytical	*Quiz	*describe on electrochemical call and
				memou	*Think pair share	differentiate between galvanic and electrolytic
				*Problem solving		cells
				*Power point	*Blackboard work	
				presentation	Blackooald work	
				Presentation		

						*justify the variation of conductivity and molar conductivity of solutions with change in concentration.
July	16	7	Alcohols ,phenols and ethers	*Learning by teaching others method	*Exit card	The student will be able to: *correlate physical properties of alcohols, phenols and ethers with their structures. *develop chemical reactions of the three classes of compounds on the basis of their functional groups.
	10	4	The d and f block Elements	*Discussion Method *Experimentation method	*Investigation project *Brainstorming activity	The student will be able to: *understand the general characteristics of the d and f block elements and their group trends. *compare the properties of lanthanoids and actinoids.
	<u> </u>	•		Periodic Test 2: 18/	7/2024 to 29/7/2024	
August	1	5	Coordination compounds	*Questionnaire method *Illustration Method *Power Point presentation *Discussion method	*Buzz session *Quiz *Think pair share	The student will be able to: *define different types of isomerism in coordination compounds. *understand valence bond and crystal field theories in coordination compounds. The student will be able to: *appreciate the importance and applications of coordination compounds in our daily life.
	7	8	Aldehydes, Ketones and carboxylic acid	*Problem solving method	*Lab activity	*explain the mechanism of few selected reactions of aldehydes and ketones.
September	8	8	Aldehydes, Ketones and carboxylic acid	*Problem solving method	*Concept Map	The student will be able to: *classify amines and explain its properties. *describe some of the important methods of preparation of amines.

	9	8	Amines	*Problem solving method *Analytical method	*Quiz *Classify amines into primary, secondary, tertiary *Writing Nomenclature of	The student will be able to: *explain the characteristics of biomolecules like carbohydrates, proteins, nucleic acids and vitamins on the basis of their structure *explain the difference between DNA and RNA	
					amines		
	I			Periodic Test 3: 23/	9/2024 to 01/10/2024		
October	9	8	Amines	*Problem solving method *Analytical method	*Quiz *Classify amines into primary, secondary, tertiary *Writing Nomenclature of amines	The student will be able to: *explain the characteristics of biomolecules like carbohydrates, proteins, nucleic acids and vitamins on the basis of their structure *explain the difference between DNA and RNA	
October	5	10	Biomolecules	*PowerPoint presentation *Laboratory method	*Think pair share *One minute paper	The student will be able to: *explain the characteristics of biomolecules like carbohydrates, proteins, nucleic acids and vitamins on the basis of their structure	
November	9	10	Biomolecules (Continued)	*Discussion method	*Exit card	*explain the difference between DNA and RNA	
Revision classes           Pre- Board 1 – 21/11/2024 to 02/12/2024           Pre board 2 – 23/01/2025 to 01/02/2025							

### CLASS: XII

# **TEACHERS: Ms. Shamitha Shetty SUBJECT: Computer Science**

Month	No. of Periods	Lesson No	Title of the Lesson	Teaching Methods	Activities	Learning Outcome
April	01	1	Chapter 1-Review of Python-I	Discussion + PowerPoint Presentation	Group Discussion	Student will be able to *understand the features of Python and its execution modes. *know about the character set, tokens , operators, punctuators , delimiters and comments in Python. *acquire knowledge about various data types used in Python and know how to do typecasting. *know various control flow statements and jump statements. Student will be able to work with strings and apply various operations on them.
	2	2	Chapter 2-Review of Python-II	Discussion + PowerPoint Presentation+ Inductive method	Group Discussion	Student will be able to * revise the concept of lists, tuples, dictionaries and modules in Python. * perform operations on lists, tuples, dictionaries and modules.

	12	3	Chapter 3- Working with	Power point	Solving worksheets+	Student is able to
			Functions	presentation+Blackboard	Practical Laboratory	*define and write functions.
					work	*understand the purpose of using
						functions.
						*define and create local and global
						variables and examine the results of
						different function parameters.
April	5	4	Chapter 4- Using Python	Discussion +	Group Discussion	Student is able to
			Libraries	PowerPoint Presentation	<b>D</b> 1 01	*compare the functions of different
					Pair and Share	functions that are categorized in
					Activity	different Python Libraries.
			Poriodi	ic Tost 1. 16-04-2024 to 20	-04-2024	
			1 01100	IC ICSt I. 10-04-2024 to 20	-04-2024	
June	4	5	Chapter 6 - Chapter	Discussion +	Computer Lab	The student will be able to
			Exception Handling	PowerPoint Presentation	Activities	*analyze the types of errors that occur
						during execution of programs and
						handle exceptions in Python.
June	8	9	Chapter 9 - Data	Discussion +	Group Discussion	Student is able to
			StructuresII : Stacks and	PowerPoint Presentation		*know about different data structures.
			Oueues using Lists		Computer Lab	*understand about Stacks in Python
					Activities	and perform operations on stacks and
						implement stack with the help of list.
July	10	5	Chapter 5-File Handling	Blackboard +	Group Discussion	Student is able to
0 dij	10	5	In Python	Discussion+ Illustration		*understand the different types of files
				method	Computer Lab	and working modes of text files binary
				mounou	Activities	files and CSV files
						*use the read()
						readline().write().writeline().seek()
						and tell() functions
						*work with binary files and implement
						different operations on binary files
						unterent operations on onary mes.

						*use modules with load() and dump() functions.
July	8	11	Chapter 11 – Relational Databases	Discussion + Practical	Computer Lab Activities	Student is able to*describe a database as a persistent,well organized collection of data.*understand the basic knowledge ofdata model and work with relationaldata model.*create tables , relationships andqueries on data model*explain the use of data handlingsoftware to create , maintain andmanipulate a database.
	<u> </u>		Period	ic Test 2: 18-07-2024 to 29	9-07-2024	
August	8	12	Chapter 12 -Simple Queries in SQL	Discussion + Practical	Computer Lab Activities	<ul> <li>Student is able to</li> <li>*understand the process of creating tables.</li> <li>*learn the method of inserting records into the table.</li> <li>*know the meaning and usage of various constraints applied on the table during the creation process.</li> </ul>
	8	13	Chapter 13 -Table creation and Data Manipulation Commands.	Discussion + Practical	Computer Lab Activities	Student is able to *apply commands and queries to retrieve the necessary records. *use the Select, Update and Modify and Alter commands.
September	8	14	Chapter 14 – Grouping Records, Joins in SQL	Discussion + Practical	Computer Lab Activities	Student is able to *understand the meaning and need of grouping the records. *learn the importance of joins and types of joins in SQL.

September	7	15	Chapter 15 -Interface of Python with SQL Database	Discussion + Practical	Computer Lab Activities	Student is able to *set up Python Environment and MySQL server. *connect to MySQL server in Python. *create a new database, create tables and table relationships, retrieve, update and delete records.
			Periodi	c Test-3 : 23-09-2024 to 01	1-10-2024	
October- November	15	10	Chapter 10 – Communication and Network Concepts	Discussion + PowerPoint Presentation + Inductive method	Quiz on Computer Networks. Group Discussion	<ul> <li>Student is able to</li> <li>*explain inter-space and Internet.</li> <li>*understand the evolution of Internet and explain the components of data communication. Student is able to differentiate between various transmission media and switching techniques.</li> <li>*understand network protocols and their function.</li> <li>* analyze and select a suitable arrangement of a network in a given scenario.</li> <li>*the basic concepts of internet and web services.</li> <li>*differentiate between various network devices and explain their function</li> </ul>
			Pre- E Pre b	Board $1 - \frac{21}{11}/\frac{2024}{2025}$ to $\frac{02}{2025}$	/12/2024 02/2025	

### CLASS: XII

# TEACHER: Ms Deepa Karkada SUBJECT: Biology

Month	No. of	Lesson	Title of the	Teaching	Activities	Learning Outcomes
	Periods	No.	Lesson	Methods		
April	08	01	Sexual Reproduction in Flowering plants	Inductive Method Power Point Presentation	Think Pair Share Quiz	The students will be able to: *identify the structures of embryo and post- fertilization events. *explain the importance of artificial hybridization.
	12	02	Human Reproduction	Discussion Method Laboratory Method Power Point Presentation	Lab activity Debate Article writing	The students will be able to: *differentiate the male and female reproductive organs. *compare the process involved in gametogenesis and spermatogenesis.
	06	03	Reproductive Health	Lecture Method Inductive method	Quiz Case based questionnaire	The students will be able to: *analysis the strategies involved in population stabilization and birth control. *classify the methods followed in Medical termination of pregnancy. *explains the different methods that help to overcome infertility.
			1	Periodic Test 1:	16-04-2024 to 20-04-2024	

June	08	07	Human Health and Disease	Experimental Method Laboratory Method Discussion Method	Project Work Case Study	The students will be able to: *distinguish between innate and acquired immunity. *identify the bacterial and viral diseases in plants and humans. *inter-relate between Addiction and Dependence.
	08	08	Microbes in Human Welfare	Discussion method Demonstration method	Role Play Round Robin	The students will be able to: *compare the role of microbes in household products, Industrial products and sewage treatment. *explains the importance of microbes as Biofertilisers.
July	12	04	Principles of Inheritance and Variation	Activity Based Method Laboratory Method Discussion Method cum	Investigatory Project	The students will be able to: *explain Mendel's Laws of Inheritance. *compares the contrasting characters studies by Mendel in Pea. *analyse the Law of Segregation using examples.
	12	05	Molecular basis of Inheritance	Analytical Method Laboratory Method Discussion Method cum Lecture Method	Concept Map Muddiest and Clearest Point activity	The students will be able to: *explain the structure of polynucleotide chain. *analyse the salient features of the Double-helix structure of DNA. *compare the genetic material of DNA and RNA.

	10	06	Evolution	Powerpoint Presentation Discussion Method	Finger Signals Reciprocal Questioning	The students will be able to: *categorise the organisms based on homologous and analogous organs. *explain the mechanism of evolution.
				Periodic Test 2:	18-07-2024 to 29-07-2024	
August	08	09	Biotechnology: Principles and Processes	Discussion method Demonstration method	Reciprocal Questioning Quiz	The students will be able to: *identify the tools of recombinant DNA Technology. *analyse the features required to facilitate cloning into a vector.
	08	10	Biotechnology and its Applications	Power point presentation Lecture method	One minute paper Concept Map	The students will be able to: *illustrate the Biotechnological applications in Agriculture. *identify the pest resistant plants. *identify the benefits of transgenic animals.
September	10	11	Organisms and Population	Inductive Method Discussion method	Think, Pair and share	The students will be able to *analyse the biotic factors responding to abiotic factors. *inter-relates the different defence mechanism in plants against herbivore.
				Periodic Test 3: 2	23-09-2024 to 01-10-2024	
October	07	12	Ecosystem	Inductive Method Discussion method	Investigation Project Debate	The students will be able to: *illustrate the decomposition cycle in terrestrial ecosystem *categorise the organisms in the various levels of Ecological pyramid.
November	8	12	Ecosystem (Contd)	Discussion method Analytical Method	Quiz Collaborative learning activity	The students will be able to: *explain the nutrient cycling. *differentiate between Production and decomposition.

	10	13	Biodiversity and	Power point	Role Play	The students will be able to:				
			Conservation	presentation		*identify the patterns of Biodiversity.				
					Concept Map	*analyse the causes of biodiversity losses in nature.				
				Illustration		*distinguish between In situ conservation and Ex				
				method		situ conservation.				
February					<b>Revision Classes</b>					
	Revision classes									
	Pre- Board 1 – 21/11/2024 to 02/12/2024									
	Pre board 2 – 23/01/2025 to 01/02/2025									