



Airport School, Ahmedabad

ACADEMIC SESSION 2024-25
SYLLABUS

SUBJECT: ENGLISH

CLASS: XII SCI

MONTH	LITERATURE READER (FLAMINGO)	SUPPLEMENTARY READER (VISTAS)	WRITING
APRIL- MAY	CH.1- THE LAST LESSON	CH.1- THE THIRD LEVEL	NOTICE WRITING
	CH.2- LOST SPRING POEM.1- MY MOTHER AT SIXTY-SIX	CH.2 – TIGER KING	
	POEM.2 KEEPING QUIET		
JUNE	CH.6 – POETS AND PANCAKES	CH.3 – JOURNEY TO THE END OF THE EARTH s	NOTICE WRITING PRACTICE
	POEM. 3 – A THING OF BEAUTY		FORMAL INVITATION
PT 1 SYLLABUS: CH. LOST SPRING CH. JOURNEY TO THE END OF THE EARTH NOTICE WRITING			
JULY	CH.3 – DEEP WATER	CH. 4- THE ENEMY	FORMAL INVITATION AND REPLIES
AUGUST	CH.4 – THE RATTRAP		FORMAL LETTER
	POEM. 4 – ROADSIDE STAND		1. EDITOR 2. JOB APPLICATION
SEPTEMBER	REVISION CH.5 - INDIGO	REVISION	REPORT WRITING ARTICLE WRITING
HALF YEARLY SYLLABUS: FLAMINGO- 1,2,3,4 VISTAS- 1,2,3,4 POEM – 1,2,3 NOTICE WRITING PRACTICE FORMAL INVITATION AND REPLIES FORMAL LETTER 1. EDITOR 2. JOB APPLICATION			
OCTOBER	CH.5 – INDIGO	CH.5 – ON THE FACE OF IT	
	POEM.5.- AUNT JENNIFER’S TIGER		
NOVEMBER	CH.7 – THE INTERVIEW	CH. 6 – MEMORIES OF THE	
	CH.8 – GOING PLACES	CHILDHOOD	
PRE-BOARD EXAMS: COMPLETE SYLLABUS			

MONTH	LESSONS/CHAPTERS	ACTIVITIES/PRACTICALS
APRIL	Ch-1. Electric charges and fields	Exp 1: Resistivity by ohm's law
	Ch-2. Electrostatic Potential and Capacitance	Exp 2: Resistance by meter bridge
		Exp 3: Combination of resistance
JUNE	Ch-3. Current Electricity	Exp 4: G by Half deflection and figure of merit
	Ch-4. Moving Charges and Magnetism	Exp 5: Converting Galvanometer into voltmeter and ammeter
JULY	Ch-5. Magnetism and Matter	Exp 6: Frequency of AC mains by sonometer
	Ch-6. Electromagnetic Induction	Exp 7: Focal length of concave mirror
		Exp 8: Focal length of convex lens
PT 1 SYLLABUS : Ch. : 1 and Ch. : 2		
AUGUST	Ch-7. Alternating current	Exp 9: Focal length of convex mirror
	Ch-8. Electromagnetic Waves	Exp 10: Focal length of concave lens
		Exp 11: Refractive index of liquid by concave mirror
SEPTEMBER	Ch-9. Ray Optics	Exp 12: Refractive index of liquid by convex lens and plane mirror
	Ch-10. Wave Optics	Exp 13: Refractive index of glass slab by travelling microscope
HY SYLLABUS: Ch.: 1 to Ch.: 7		
OCTOBER	Ch-11. Dual Nature of Radiation and Matter	Exp 14: Minimum deviation by prism
	Ch-12. Atoms	Exp 15: IV characteristics of simple diode in forward bias and reverse bias
NOVEMBER	Ch-13. Nuclei	
	Ch-14. Semiconductor electronics: Material, devices and simple circuits	
PRE-BOARD EXAMS: Full syllabus		

MONTH	LESSONS/CHAPTERS	ACTIVITIES/PRACTICALS
APRIL	Ch-1 Solution & Ch - 10 Halo alkane & Haloarene	Volumetric Titration (Oxidation - Reduction) $KMnO_4$ Vs Mohr's Salt & $KMnO_4$ Vs Oxalic acid
MAY	Ch - 10 Halo alkane & Haloarene (contd)	Salt Analysis: gr - 0

JUNE	Ch – 11-Alcohol, Phenols & Ethers Ch – 13 – Amines	Salt Analysis: gr – 1 & 2
JULY	Ch – 12 – Aldehyde & Ketones Ch – 3 – Electrochemistry	Salt Analysis: gr – 3 & 4
P.T. – 1 SYLLABUS: Ch – 1 : Solution and Ch – 10 : Halo alkane & Haloarene		
AUGUST	Ch – 4 – Chemical Kinetics Ch – 8 – d & f – Block Elements	Salt Analysis: gr – 5 & 6
SEPTEMBER	Ch – 8 - d & f – Block Elements (contd)	Organic Functional Group Detection
HALF-YEARLY SYLLABUS: Ch 1,3,4 10, 11 & 12.		
OCTOBER	Ch – 9 – Co – ordination Compound Ch – 14 – Bio – Molecules	Organic Functional Group Detection
NOVEMBER	Ch – 14 – Bio – Molecules (contd)	Organic Functional Group Detection
PRE-BOARD EXAMS: Full syllabus		

SUBJECT: MATHEMATICS

CLASS: XII SCI

MONTH	CHAPTERS	ACTIVITIES
APRIL	Ch3. Matrices Ch4. Determinants Ch1. Relations and Functions	
MAY	Ch1. Relations and Functions (contd...)	
JUNE	Ch1. Relations and Functions Ch2. Inverse Trigonometric Functions Ch5. Continuity and Differentiability	(1) To verify that the relation R in the set L of all lines in a plane, defined by $R = \{(l, m) : l \perp m\}$ is symmetric but neither reflexive nor transitive. (2) To verify that the relation R in the set L of all lines in a plane, defined by $R = \{(l, m) : l \parallel m\}$ is an equivalence relation.
JULY	Ch5. Continuity and Differentiability (contd...) Ch6. Application of Derivatives	(3) To demonstrate a function which is not one-one but is onto. (4) To demonstrate a function which is one-one but not onto. (5) To find analytically the limit of a function at a point and also to check the continuity of the function at that point.

AUGUST	Ch6. Application of Derivatives (Contd...) Ch7. Integrals	(6) To understand the concepts of absolute maximum and absolute minimum of a function in a given closed interval through its graph. (7) To construct an open box of maximum volume from a given rectangular sheet by cutting equal squares from each corner
SEPTEMBER	Ch7. Integrals (Contd...)	
Syllabus for H.Y: Chapters: 1, 2, 3, 4, 5 and 6		
OCTOBER	Ch8. Application of Integrals Ch9. Differential Equations Ch10. Vector Algebra	(8) To verify that angle in a semi-circle is a right angle, using vector method.
NOVEMBER	Ch10. Vector Algebra (Contd...) Ch11. Three-dimensional geometry Ch13. Probability Ch12. Linear Programming	(9) To locate the points to given co-ordinates in space, measure the distance between two points in space and then to verify the distance using distance formula. (10) To explain the computation of conditional probability of a given event A, when event B has already occurred, through an example of throwing a pair of a dice.
PRE-BOARD EXAMS: All chapters		

SUBJECT: BIOLOGY

CLASS: XII SCI

MONTH	LESSONS/CHAPTERS	ACTIVITIES/PRACTICALS
MARCH	Chap 1: Sexual Reproduction in flowering plants	Exp 1 (part B): To study adaptations of flowers for pollinating agents Exp 2 (part B): To study controlled pollination by images or charts
APRIL	Chap 1: Sexual Reproduction in Flowering Plants (Contd...) Chap 2: Human Reproduction	Class Test of chap 1 and 2 Exp 1 (part A). To prepare a slide of pollen grain germination. Exp 3 (Part B). To study pollen germination through permanent slide Exp 4 (part B) : To observe permanent slides of blastula, mammal testes and ovary Diagram Practice using the worksheet Quiz Shown 3D models of male and female pelvic
MAY	Chap 3: Reproductive Health	Exp 2 (part A): Isolation of DNA

JUNE	Chap 4: Principles of inheritance	Exp 5 (part B): To study Mendelian characteristics using pea seeds
	Chap 5: Molecular Basis of Inheritance	Exp 6 (part B): Study pedigree chart of color blindness
PT-1 Syllabus Ch. 1 & 2		
JULY	Chap 7: Human health and diseases.	Exp 7 (part B): To study common diseases causative agents and symptoms with the help of specimen
	Chap 8: Microbes in human welfare.	Exp 3 (part A): To study mitosis through onion root tip
AUGUST	Chap 11: Organisms and Population	Exp 4 (part A): To study population density and frequency of the given population.
	Chap 12: Ecosystem	
SEPTEMBER	Revision	
HALF YEARLY SYLLABUS: Chapters: 1 to 5, 7 and 8		
OCTOBER	Chap 9: Biotechnology: Principles and Processes	Exp 8 (part B): To study symbiotic relationship with specimens of cuscuta, lichens and root nodules
	Chap 10: Biotechnology and its application	
NOVEMBER	Chap 13: Biodiversity and Conservation	Exp 9 (part B): To study homologous and analogous organs through charts/images
	Chap 6: Evolution	
PRE-BOARD EXAMS: Full syllabus		

SUBJECT: COMPUTER SCIENCE

CLASS: XII SCI

MONTH	LESSONS/CHAPTERS	ACTIVITIES/PRACTICALS
APRIL-MAY	Python MySQL Connectivity.	Python - MySQL Connectivity,
	Revision of std. 11 [python basics, loops, working with list, tuple, dictionary]	Logical programs of list, tuples and dictionaries with searching, sorting
JUNE	Functions, [Inbuilt-Predefined-UDF, Libraries, Packages, Modules]	Predefined functions, and its libraries. with package creating and use of yused defined modules
JULY	Data File Handling [.txt. .bin,csv, Absolute, Relative path], Exceptional Handling.	Working with characters, words, lines, dumping loading records, working with csv files, applying paths to python programs

PT-1 SYLLABUS:

1. Python-MySQL Connectivity
2. Functions
3. DHF

AUGUST	Linked list, Stacks, Queues, Stack Implementation	Pushing popping, add, remove search values from data structure stack and queues
SEPTEMBER	DBMS, MySQL DDL, DML	SQL Queries making data base, adding values, searching filtering altering and removing records from database
HALF YEARLY SYLLABUS:		
1. PT-1 Syllabus 2. Data Structure 3. DBM-MySQL		
OCTOBER	MySQL	Connecting tables, equijoin, natural join, aggregate functions
	Network and communication	CS project solutions
NOVEMBER	Network and communication, Revision	Python - MySQL practice and doubts solving