

**D.A.V. PUBLIC SCHOOL, AIROLI**  
**SYLLABUS BOOKLET-2024-25**  
**STD- XII (Science)**

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**Class Test-1 (Marks-25) (June 2024)**

**Sub: English**

- Topics: 1) VISTAS:1.THE THIRD LEVEL  
2) FLAMINGO: 1.THE LAST LESSON  
3) FLAMINGO:POEM-MY MOTHER AT 66.  
4) WRITING:NOTICE  
5) COMPREHENSION PASSAGE

**Sub: Physics**

- Topics: 1) Electric charges and fields  
2) Electric potential and capacitance

**Sub: Chemistry**

- Topics: 1) Electrochemistry  
2) Haloalkanes and Haloarenes

**Sub: Mathematics**

- Topics: 1) Matrices  
2) Determinants  
3) Linear programming problem.

**Sub: Biology**

- Topics: 1) Principles of Inheritance and Variation  
2) Molecular Basis of Inheritance

**Sub: Computer Science**

- Topics: 1) Python Review (Basics)  
2) Python Review (Lists, Tuples, Dictionary)

**Sub: Physical Education**

- Topics: 1) Management of Sporting Events.  
2) Children and Women in Sports.

**Sub: Psychology**

- Topics: 1) Variations in Psychological attributes  
2) Self and Personality

## **Class Test-2 (Marks-25) (August 2024)**

### **Sub: English**

Topics: 1) FIAMINGO:THE LOST SPRING  
2)FIAMINGO:POEM-KEEPING QUIET  
3)VISTAS:THE TIGER KING  
4)WRITING:INVITATION AND REPLIES  
5)COMPREHENSION PASSAGE

### **Sub: Physics**

Topics: 1)Current electricity  
2)Moving charges and magnetism

### **Sub: Chemistry**

Topics: 1)Chemical kinetics  
2)Alcohols phenols and ethers

### **Sub: Mathematics**

Topics: 1)Continuity and differentiability  
2) Application of derivatives  
3) indefinite integrals (Ex 7.1 and Ex 7.2 only)

### **Sub: Biology**

Topics: 1) Molecular Basis of Inheritance  
2) Evolution

### **Sub: Computer Science**

Topics: 1) Functions  
2) Python Libraries  
3) File Handling (Text files)

### **Sub: Physical Education**

Topics: 1) Yoga as Preventive measure for Lifestyle Disease.  
2) Physical Education and Sports for CWSN.

### **Sub: Psychology**

Topics: 1) Variations in Psychological attributes  
2) Self and Personality  
3) Meeting life Challenges

## First Term Examination (Marks-80/70) Sept 2024

### **Sub: English**

- Topics: 1. Reading Comprehension through Unseen Passage.  
2. Writing : Notice, Formal/Informal Invitation & replies, application for a job with bio-data, Letter to the Editor, Article, Report.  
3. literature: Flamingo: The Last Lesson, Lost Spring, Deep Water, The Rattrap, Indigo, (Poetry) My Mother at Sixty-Six, Keeping Quiet, A Thing of Beauty  
4. Vistas: The Third Level, The Tiger King, Journey to the end of the Earth

### **Sub: Physics**

- Topics: 1) Electric charges and fields  
2) Electric potential and capacitance  
3) Current electricity  
4) Moving charges and magnetism  
5) Magnetism and matter  
6) EMI and AC  
7) EMW

### **Sub: Chemistry**

- Topics: 1) Electrochemistry  
2) Haloalkanes and Haloarenes  
3) Chemical kinetics  
4) Alcohols phenols and ethers  
5) d and f-block elements  
6) Solutions

### **Sub: Mathematics**

- Topics: 1) Relations and functions  
2) Inverse trigonometric functions  
3) Matrices  
4) Determinants  
5) Linear programming problem  
6) Continuity and Differentiability  
7) Application of Derivatives  
8) Integrals

### **Sub: Biology**

- Topics: 1) Principles of Inheritance and Variation  
2) Molecular Basis of Inheritance  
3) Evolution  
4) Biotechnology - Its Principles  
5) Biotechnology - Its Application  
6) Reproduction in Flowering Plants  
7) Human Reproduction  
8) Reproductive Health

### **Sub: Computer Science**

- Topics:
- 1) Review of Python Basics
  - 2) Functions, libraries
  - 3) Data file Handling(text and binary)
  - 4) Introduction to Database
  - 5) Programming with SQL

### **Sub: Physical Education**

- Topics:
- 1) Management of Sporting Events.
  - 2) Children and Women in Sports.
  - 3) Yoga as Preventive measure for Lifestyle Disease.
  - 4) Physical Education and Sports for CWSN.
  - 5) Sports and Nutrition.
  - 6) Test & Measurement in sports.
  - 7) Physiology & Injuries in sports.
  - 8) Biomechanics & Sports.

### **Sub: Psychology**

- Topics:
- 1) Variations in Psychological attributes
  - 2) Self and Personality
  - 3) Meeting life Challenges
  - 4) Psychological Disorders

## **I- Preboard Dec- 2024 Examination(Marks-80/70) Dec - 24**

### **Sub: English**

- Topics:
1. Reading Comprehension through Unseen Passage.
  2. Writing : Notice, Formal/Informal Invitation and Replies, application for a job with bio-data, Letter to the editor, Article, Report.
  3. literature: Flamingo: (Prose) The Last Lesson, Lost Spring, Deep Water, The Rattrap, Indigo, Poets and Pancakes, The Interview, Going Places. (Poetry) My Mother at Sixty-Six, Keeping Quiet, A Thing of Beauty, A road side stand, Aunt Jennifer's Tigers.
  4. Literature Vistas: The Third Level, The Tiger King, Journey to the end of the Earth, The Enemy, On the Face of It, Memories of childhood.

### **Sub: Physics**

- Topics:
- 1) Electric charges and fields
  - 2) Electric potential and capacitance
  - 3) Current electricity
  - 4) Moving charges and magnetism
  - 5) Magnetism and matter
  - 6) Electromagnetic induction
  - 7) Alternating current
  - 8) Electromagnetic
  - 9) Ray optics and optical instruments
  - 10) Wave optics
  - 11) Dual nature of radiation and matter
  - 12) Atoms
  - 13) Nuclei
  - 14) Electronic devices

## **Sub: Chemistry**

- Topics:
- 1) Electrochemistry
  - 2) Haloalkanes and Haloarenes
  - 3) Chemical kinetics
  - 4) Alcohols phenols and ethers
  - 5) d and f-block elements
  - 6) Coordination compounds
  - 7) Aldehydes ketones and carboxylic acids
  - 8) Solutions
  - 9) Amines
  - 10) Biomolecules

## **Sub: Mathematics**

- Topics:
- 1) Relations and Functions
  - 2) Inverse trigonometric functions
  - 3) Matrices
  - 4) Determinants
  - 5) Continuity and Differentiability
  - 6) Applications of Derivatives
  - 7) Integration
  - 8) Application of Integrals
  - 9) Differential equations
  - 10) Vectors
  - 11) 3 Dimensional Geometry
  - 12) probability
  - 13) Linear programming problem.

## **Sub: Biology**

- Topics:
- 1) Principles of Inheritance and Variation
  - 2) Molecular Basis of Inheritance
  - 3) Evolution
  - 4) Biotechnology - Its Principles
  - 5) Biotechnology - Its Application
  - 6) Reproduction in Flowering Plants
  - 7) Human Reproduction
  - 8) Reproductive Health
  - 9) Human Health and Diseases
  - 10) Microbes in Human Welfare
  - 11) Organisms and Populations
  - 12) Ecosystem
  - 13) Biodiversity and Conservation

## **Sub: Computer Science**

- Topics:
- 1) Python Review (Basics)
  - 2) Python Review (Lists, Tuples, Dictionary)
  - 3) Functions
  - 4) Data file Handling
  - 5) Data structure
  - 6) Introduction to Database
  - 7) Programming with SQL
  - 8) Joins in SQL
  - 9) Computer Networks

**Sub: Physical Education**

- Topics:
- 1) Management of Sporting Events.
  - 2) Children and Women in Sports.
  - 3) Yoga as Preventive measure for Lifestyle Diseases.
  - 4) Physical Education and Sports for CWSN.
  - 5) Sports and Nutrition.
  - 6) Test & Measurement in Sports.
  - 7) Physiology and Injuries in sport.
  - 8) Biomechanics and sports.
  - 9) Psychology and Sports.
  - 10) Training in Sports.

**Sub: Psychology**

- Topics:
- 1) Variations in Psychological Attributes
  - 2) Self and Personality
  - 3) Meeting life challenges
  - 4) Psychological Disorders
  - 5) Therapeutic Approaches
  - 6) Attitude and Social Cognition
  - 7) Social Influence and Group Processes

**II- Preboard Jan- 2025 Examination(Marks-80/70) Jan - 25**

Same Syllabus as Preboard- 1