

**SYLLABUS FOR ACADEMIC SESSION (2021-22)**

**CLASS X  
CHEMISTRY**

**Unit No. I Chemical Substances-Nature and Behaviour Unit Marks:26**

CHAPTER NO	TOPIC
1	CHEMICAL REACTIONS AND EQUATIONS
2	ACIDS, BASES AND SALTS
3	METALS AND NON – METALS
4	CARBON AND ITS COMPOUNDS
5	PERIODIC CLASSIFICATION OF ELEMENTS

S.NO	EXAMINATION	CHAPTERS/TOPICS INCLUDED	CHANGE IN SYLLABUS DISTRIBUTION
1	PRE TERM-I	1.CHEMICAL REACTIONS AND EQUATIONS	NO CHANGE
2	PRE TERM-II	2. ACIDS, BASES AND SALTS	NO CHANGE
3	FIRST TERM	1.CHEMICAL REACTIONS AND EQUATIONS 2. ACIDS, BASES AND SALTS 3.METALS AND NON METALS 4.CARBON AND ITS COMPOUNDS-COVALENT BONDING ONLY.	1.BASIC METALLURGICAL PROCESSES, CORROSION AND ITS PREVENTION( <b>ELIMINATED</b> ) 2.COVALENT BONDING ( <b>ADDED</b> )
4	PRE BOARD I	1.CHEMICAL REACTIONS AND EQUATIONS 2. ACIDS, BASES AND SALTS 3.METALS AND NON METALS 4.CARBON AND ITS COMPOUNDS 5 PERIODIC CLASSIFICATION OF ELEMENTS	1.BASIC METALLURGICAL PROCESSES, CORROSION AND ITS PREVENTION( <b>ELIMINATED</b> ) 2.FUNCTIONAL GROUP,ETHANOL,ETHANOIC ACID AND SOAPS AND DETERGENTS( <b>ELIMINATED</b> )
4	PRE BOARD II	1.CHEMICAL REACTIONS AND EQUATIONS 2. ACIDS, BASES AND SALTS 3.METALS AND NON METALS 4.CARBON AND ITS COMPOUNDS 5. PERIODIC CLASSIFICATION OF ELEMENTS	1.BASIC METALLURGICAL PROCESSES, CORROSION AND ITS PREVENTION( <b>ELIMINATED</b> ) 2.FUNCTIONAL GROUP,ETHANOL,ETHANOIC ACID AND SOAPS AND DETERGENTS( <b>ELIMINATED</b> )

**Theme: Materials**

**Unit I: Chemical Substances - Nature and Behaviour**

**Chemical reactions:** Chemical equation, Balanced chemical equation, implications of a balanced chemical equation, types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, neutralization, oxidation and reduction.

**Acids, bases and salts:** Their definitions in terms of furnishing of H<sup>+</sup> and OH<sup>-</sup> ions, General properties, examples and uses, concept of pH scale (Definition relating to logarithm is not required), importance of pH in everyday life; preparation and uses of Sodium Hydroxide, Bleaching powder, Baking soda, Washing soda and Plaster of Paris.

**Metals and nonmetals:** Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds.

**Carbon compounds:** Covalent bonding in carbon compounds. Versatile nature of carbon. Homologous series.

**Periodic classification of elements:** Need for classification, early attempts at classification of elements (Dobereiner's Triads, Newland's Law of Octaves, Mendeleev's Periodic Table), Modern periodic table, gradation in properties, valency, atomic number, metallic and non-metallic properties.

## PRACTICALS

Practical should be conducted alongside the concepts taught in theory classes

### LIST OF EXPERIMENTS

- Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with
  - Litmus solution (Blue/Red)
  - Zinc metal
  - Solid sodium carbonate
- Performing and observing the following reactions and classifying them into:
  - Combination reaction
  - Decomposition reaction
  - Displacement reaction
  - Double displacement reaction
    - Action of water on quicklime
    - Action of heat on ferrous sulphate crystals
    - Iron nails kept in copper sulphate solution
    - Reaction between sodium sulphate and barium chloride solutions
- Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions:
  - ZnSO<sub>4</sub>(aq)
  - FeSO<sub>4</sub>(aq)
  - CuSO<sub>4</sub>(aq)
  - Al<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>(aq)Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result.

### SYLLABUS FOR ACADEMIC SESSION (2021-2022)

#### CLASS- X

#### PHYSICS

CHAPTER NO.	TOPIC
10	LIGHT- REFLECTION AND REFRACTION
11	HUMAN EYE AND COLOURFUL WORLD
12	ELECTRICITY
13	MAGNETIC EFFECTS OF ELECTRIC CURRENT

### SYLLABUS DISTRIBUTION

**PRE-TERM-I CHAPTER: 12 (up to & including article 12.6.2 of Science NCERT text book)**

**PRE-TERM-II: CHAPTERS: 12**

**FIRST TERM: CHAPTERS: 12,13**

**SECOND PRE-TERM-I: CHAPTER :10**

**PRE-BOARD-I: CHAPTERS: 10, 11, 12, 13 (entire syllabus)**

**PRE-BOARD-II: CHAPTERS: 10, 11, 12, 13 (entire syllabus)**

### MOUNT ST. MARY'S SCHOOL

SYLLABUS 2021-22

CLASS-10 BIOLOGY

#### FIRST-TERM

- PRE-TERM -1: Chapter 6 and Chapter 7 including article 7.1 and 7.1.4
- PRE-TERM-2: Chapter 7 (7.2 Onwards) and Chapter 8
- FIRST TERM: Chapter 6,7,8

#### FINAL -TERM

- SECOND PRE -TERM -1: Chapter 15, 16
- PRE-BOARD 1: ENTIRE SYLLABUS
- PRE-BOARD 2: ENTIRE SYLLABUS

**MOUNT ST. MARY'S SCHOOL**  
**MATHS SYLLABUS**  
**CLASS-X**  
**SESSION -2021-22**

**PRE TERM 1**

1. Coordinate Geometry
2. Probability

**PRE TERM 2**

1. Polynomials
2. Real Numbers

**HALF YEARLY**

1. Coordinate Geometry
2. Probability
3. Polynomials
4. Real Numbers
5. Linear Equations in two variables
6. Triangles
7. Introduction to Trigonometry
8. Statistics

**POST TERM 1**

1. Application of Trigonometry
2. Quadratic Equations

**POST TERM 2**

1. Circles
2. Areas related to Circles

**FINAL TERM**

1. Coordinate Geometry
2. Probability
3. Polynomials
4. Real Numbers
5. Linear Equations in two variables
6. Triangles
7. Introduction to Trigonometry
8. Statistics
9. Quadratic Equations
10. Arithmetic Progressions
11. Circles
12. Constructions

**13. Surface Area & Volume**

**14. Areas related to Circles**

**15. Application of Trigonometry**

**NOTE: Activities and Assignments based on AIL (art integration learning) will be carried out every month.**

**Mount St. Mary's School  
Syllabus(2021-22)  
ARTIFICIAL INTELLIGENCE (417)  
Class X**

**Preterm-1(First Term)**

Introduction to AI

**Preterm-2(First Term)**

AI Project Cycle

Communication Skills-II

Self Management Skills-II

**Half Yearly Exam**

1. Introduction to AI
2. AI Project Cycle
3. Communication Skills-II
4. Self-Management Skills-II
5. Basic Information and Communication Technology Skills-II
6. Advanced Python (To be assessed through Practicals)

**Preterm-1(Second Term)**

Natural Language Processing

Entrepreneurial Skills-II

Green Skills-II

**Course to be taught in Second Term and assessed in Preboard**

Evaluation/Regression Analysis

**Practicals**

Data Science

Computer Vision

**PreBoard-1(Second Term)**

Full Course

**PreBoard-2**

Full Course

प्री-टर्म -1

स्पर्श- गद्य-	बड़े भाई साहब
पद्य-	कबीर की साखी
व्याकरण-	वाक्य रचना, मुहावरे, सूचना (प्रारूप), समास - द्विगु, द्वंद्व

प्री-टर्म -2

स्पर्श- गद्य-	डायरी का एक पन्ना
पद्य-	मीरा के पद
व्याकरण-	वाक्य रचना, मुहावरे, सूचना (प्रारूप), बहुब्रीहि समास -, कर्मधारय

अर्ध वार्षिक

स्पर्श- गद्य-	ततारा-वामीरो, अब कहाँ दूसरे के दुख से दुखी होने वाले, बड़े भाई साहब, डायरी का एक पन्ना
पद्य-	बिहारी, मनुष्यता, कबीर की साखी, मीरा के पद
संचयन-	हरिहर काका
व्याकरण-	वाक्य रचना, मुहावरे, सूचना, समास, पदबंध, अलंकार विज्ञापन, पत्र(औपचारिक), अनुच्छेद, अपठित गद्यांश, पठित काव्यांश, पठित गद्यांश लघुकथा, प्रथम त्रैमासिक

प्री-टर्म -1

स्पर्श- गद्य-	गिन्नी का सोना, झेन की देन
पद्य-	पर्वत प्रदेश में पावस
संचयन-	सपनों के-से दिन
व्याकरण-	वाक्य रचना, मुहावरे, समास, लघुकथा, पत्र (प्रारूप)

प्री-टर्म -2

स्पर्श- गद्य-	कारतूस
पद्य-	तोप
संचयन-	सपनों के-से दिन, हरिहर काका
व्याकरण-	वाक्य रचना, लघुकथा, पठित गद्यांश, पठित पद्यांश

प्री-बोर्ड-1

स्पर्श- पद्य-	कर चले हम फिदा, आत्मत्राण
संचयन-	टोपी शुक्ला

संपूर्ण पाठ्यक्रम

प्री-बोर्ड-2

(संपूर्ण पाठ्यक्रम )

CLASS -X  
SUBJECT -SOCIAL SCIENCE  
SYLLABUS (2021-2022)  
(CODE-087)

**HISTORY**

**Section 1: Events and Processes**

1. The Rise of Nationalism in Europe
2. Nationalism in India (Includes Map Work)

**Section 2: Livelihoods, Economies and Societies (Any One)**

3. The Making of a Global World (**For Internal Assessment only. This Chapter Will Not Be Evaluated in Board Examination**)
4. The Age of Industrialisation

**Section-3: Everyday Life, Culture and Politics. (THIS SECTION HAS BEEN DELETED FROM THE SYLLABUS)**

5. Print Culture and the Modern World

**GEOGRAPHY**

1. Resources and Development

2. Forest and Wildlife Resources (**For Internal Assessment only. This Chapter Will Not Be Evaluated in Board Examination**)

3. Water Resources (**For Internal Assessment Only. This Chapter Will Not Be Evaluated in Board Examination**)

4. Agriculture

5. Minerals and Energy Resources (**ONLY FOR MAP WORK.THIS CHAPTER HAS BEEN DELETED FROM THE SYLLABUS**)

6. Manufacturing Industries

7. Lifelines of National Economy

NOTE: Map skills for all the above-mentioned chapters will be done.

**POLITICAL SCIENCE**

1. Power Sharing

2. Federalism

3. Democracy and Diversity (**THIS SECTION HAS BEEN DELETED FROM THE SYLLABUS**)

4. Gender, Religion and Caste (**THIS SECTION HAS BEEN DELETED FROM THE SYLLABUS**)

5. Popular Struggles and Movements (**To Be Done for The Project Work**) (**THIS SECTION HAS BEEN DELETED FROM THE SYLLABUS**)

6. Political Parties

7. Outcomes of Democracy

8. Challenges to Democracy (**THIS SECTION HAS BEEN DELETED FROM THE SYLLABUS**)

**ECONOMICS**

1. Development

2. Sectors of the Indian Economy

3. Money and Credit

4. Globalisation and the Indian Economy

5. Consumer Rights (**TO BE DONE FOR THE PROJECT WORK ONLY**)

**P(ROJECT WORK)** Every student has to compulsorily undertake any one project on the following topics: **CONSUMER AWARENESS OR SOCIAL ISSUES**

**EXAMINATION SYLLABUS**

**TERM -I (PRE-TERM 1)**

Ch - 2 Nationalism in India (History)

Ch -1 Power Sharing (Pol.Sc)

Ch -1 Resources and Development (Geography)

## **TERM -I (PRE-TERM 2)**

Ch-2 Federalism (Pol.Sc)

Ch-1 Development

## **HALF YEARLY EXAMINATION**

### **HISTORY:**

Ch-1 The Rise of Nationalism in Europe

Ch-2 Nationalism in India

### **GEOGRAPHY**

Ch-1 Resources and Development

Ch-4 Agriculture

Ch-6 Manufacturing Industries

### **POLITICAL SCIENCE**

Ch-1 Power Sharing

Ch-2 Federalism

### **ECONOMICS**

Ch-1 Development

Ch-2 Sectors of the Indian Economy

## **SECOND TERM (PRETERM -1)**

Ch-6 Political Parties (Pol.sc)

Ch-7 Outcomes of Democracy (Pol.sc)

Ch-7 Life lines of National Economy (Geog)

Ch-3 Money and Credit (Eco)

## **PRE-BOARD I**

Ch-4 Globalisation and the Indian Economy

**INCLUDING ALL THE PREVIOUS CHAPTERS OF HISTORY, POLITICAL SCIENCE, GEOGRAPHY AND ECONOMICS (FULL SYLLABUS)**

## **PRE -BOARD II**

**FULL SYLLABUS OF SOCIAL SCIENCE**

## **Class 10 – English – Syllabus 2021 – 22**

### **Pre Term 1**

FIRST FLIGHT:

1. A Letter to God
2. *Dust of Snow*
3. *Fire and Snow*

Grammar – Tenses

Modals

Active/Passive Voice

Subject Verb Concord

Comprehension of an unseen passage

## Pre Term 2

1. Nelson Mandela

2. ***A Tiger In The Zoo***

Grammar – Tenses

Modals

Active/Passive Voice

Subject Verb Concord

Comprehension of an unseen passage

## Half Yearly

### FIRST FLIGHT:

1. A Letter to God

2. ***Dust of Snow***

3. ***Fire and Snow***

4. Nelson Mandela

5. ***A Tiger In The Zoo***

6. Two Stories About Flying

7. ***How to Tell Wild Animals***

8. ***The Ball Poem***

9. From The Diary of Anne Frank

10. ***Amanda***

11. The Hundred Dresses I and II

12. ***Animals***

### FOOTPRINTS WITHOUT FEET

1. A Triumph of Surgery
2. The Thief's Story
3. The Midnight Visitor
4. A Question of Trust
5. Footprints Without Feet

Writing Skills – Article

Grammar – Tenses

Modals

Active/Passive Voice

Subject Verb Concord

Reported Speech

Commands and Requests

Statements

Questions

Clauses:- Noun, Adverb, Relative

Determiners

Prepositions

## UNIT 2

### Pre Term 1

1. The Hundred Dresses I and II

2. ***Amanda***

Grammar – Tenses

Modals

Clauses:- Noun, Adverb, Relative

Determiners

Prepositions



Comprehension of an unseen passage

**Pre Term 2**

- 1.Glimpses of India
- 2.Madam Rides the Bus

***For Anne Gregory***

Grammar –Tenses

Modals

Clauses:- Noun, Adverb, Relative

Determiners

Prepositions

Comprehension of an unseen passage

**PRE –BOARD 1 & 2**

**FIRST FLIGHT : COMPLETE BOOK**

**FOOTPRINTS WITHOUT FEET : COMPLETE BOOK**

**ALL WRITING SKILLS AND GRAMMAR TOPICS PREVIOUSLY DONE IN  
TERM I & 2**