### THE AIR FORCE SCHOOL: SUBROTO PARK: DELHI CANTT-110010

# Class - X

## **Sub: CHEMISTRY**

# Weekly Syllabus

## **Academic Session 2023-24**

Month	Week	Dates		Days	No of Periods	Chapter	Contents	Syllabus
Mar-23		9-27		13		1.CHEMICAL REACTIONS AND EQUATIONS	1.1 Chemical equations 1.2 1.1.1Writing a chemical equation 1.1.2Balanced chemical equation 1.1.2Balanced chemical equation 1.2.Types of chemical reactions 1.2.1.Combination reaction 1.2.2.Decomposition reaction 1.2.3.Displacement reaction 1.2.2.Decomposition reaction	
Apr-23	I	01	01-Working Saturday (Student)	01		1.CHEMICAL REACTIONS AND EQUATIONS	1.2.Types of chemical reactions 1.2.3.Displacement reaction	
	II	03-07	04 - Mahavir Jayanti 07 – Good Friday	03		1.CHEMICAL REACTIONS AND EQUATIONS	1.2.4.Double displacement reaction 1.2.5.Oxidation and reduction	
	III	10-14	14 - Ambedakar Jayanti	04		1.CHEMICAL REACTIONS AND EQUATIONS	1.3.1.Corrosion 1.3.2 Rancidity	
						PRACTICALS	To study the following chemical reactions:	
							a) Combination Reaction	

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						b) Decomposition reaction	
						, ,	
						c) Displacement reaction	
						d) Double displacement reaction:-	
						□ Action of water on quick lime	
						□ Action of heat on ferrous sulphate	
						crystals	
						□ Iron nails kept in copper sulphate	
						solution	
						□ Reaction between barium chloride	
						and sodium sulphate solutions	
	IV	17-21	05		2.ACIDS BASES AND SALTS	Introduction Indicator tests for acids and bases 2.1.1- Acids and Bases in the laboratory 2.1.2How do acids and bases react with metals? 2.1.3 How do metal hydrogen carbonates and metal carbonates react with acids?	
					PRACTICALS	To study the following chemical reactions:  a) Combination Reaction b) Decomposition reaction c) Displacement reaction d) Double displacement reaction:  Action of water on quick lime Action of heat on ferrous sulphate crystals	

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							<ul> <li>□ Iron nails kept in copper sulphate solution</li> <li>□ Reaction between barium chloride and sodium sulphate solutions</li> </ul>	
	V	24-29	29-Working Saturday (Student)  29 - Parent Orientation VI & IX	06		2.ACIDS BASES AND SALTS	2.1.4 How do acids and bases react with each other? 2.1.5 Reaction of metallic oxides with acids 2.1.6 Reaction of metallic oxides 2.1.4 How do acids and bases react with each other? 2.1.5 Reaction of metallic oxides with acids 2.1.6 Reaction of metallic oxides To study the properties of acids and bases (HCl and NaOH) by their reactions with (i) Litmus solution (ii) Zinc metal (iii) Solid sodium carbonate	
May-23	I	01-05	05 - Budha Purnima 01-04 : ES-1 (XII)/ CT-1 (X)	04		2.ACIDS BASES AND SALTS	2.2 What do all acids and bases have in common? 2.2.1 What happens to acids and bases in water solution? 2.3 How strong are acid and base solutions?  To study the properties of acids and	ES-1 (XII)/ CT-1 (X) Date: 01-08 May  1.CHEMICAL REACTIONS AND EQUATIONS (till topic 1.2.4 Double displacement reaction page no. 12) i.e before topic 1.2.5
	II	08-12	08 : ES-1 (XII)/ CT-1 (X) 11,12 – The Quest	05		PRACTICALS  2.ACIDS BASES AND SALTS	bases (HCl and NaOH) by their reactions with (i) Litmus solution (ii) Zinc metal (iii) Solid sodium carbonate  2.3 How strong are acid and base solutions?	ιοριο 1.2.3

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							2.3.1 Importance of pH in daily life 2.4 More about salts	
						PRACTICALS	Finding the pH of the given samples using pH paper or universal indicator	
	III	15-20	20- Working Saturday (Open House X & XII)	06		2.ACIDS BASES AND SALTS	2.4.3 Chemicals from common salt Plaster of Paris 2.4.3 Chemicals from common salt 2.4.4 Are the crystals really dry?	
						PRACTICALS	Finding the pH of the given samples using pH paper or universal indicator	
			****	SUMN	IER BRE	AK 22 MAY -30 JU	UN 2023 *****	
Jul-23	I	01-	01- School reopens for staff	01		3. METALS AND NONMETALS	3.1 Physical properties 3.1.1 Metals 3.1.2 Non metals	PT-I Class VI-X Date: 07 Jul – 19Jul
	II	03-07		05		3. METALS AND NONMETALS	3.2 Chemical Properties 3.2.1 What happens when metals are burnt in air? 3.2.2 What happens when metals are burnt in water?	ES-2 (XII): 07 Jul – 19Jul 1.CHEMICAL REACTIONS AND EQUATIONS
						PRACTICALS	Reactivity series of metals (Fe, Cu, Zn, Al)	2.ACIDS BASES AND SALTS (till topic 2.1 Chemical properties of acids and bases i.e 2.1.6 page no. 22) Blue box
	III	10-14		05		3. METALS AND NONMETALS	3.2.3 What happens when metals react with acids? 3.2.4 How do metals react with solution of other metal salts? 3.2.5 The reactivity series	questions also included

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					renous			
						PRACTICALS	Reactivity series of metals (Fe, Cu, Zn, Al)	
	IV	17-22	22 – Working Saturday (Students)	06		3. METALS AND NONMETALS	3.3 How do metals and non-metals react? 3.3.1 Properties of ionic compounds 3.4 Occurrence of metals	
						PRACTICALS	Properties of acetic acid	
	V	24-28	29-Muharram	05		3. METALS AND NONMETALS	3.4.1. to 3.4.5.Extraction of metals 3.4.6. Refining of metals.	
						PRACTICALS	Properties of acetic acid	
	VI	31		01		3. METALS AND NONMETALS	3.5. –Corrosion- its prevention, rusting of iron	
Aug-23	I	01-05	05 – Working Saturday (Open House (VI- X), XII)	05		4.CARBON AND ITS COMPOUNDS	Introduction 4.1 –bonding in carbon Types of covalent bonds	
						PRACTICALS	Comparison of foaming capacity of soap in hard and soft water	
	II	07-11		05		4.CARBON AND ITS COMPOUNDS	4.1 –bonding in carbon Types of covalent bonds Allotropes of carbon	
						PRACTICALS	Comparison of foaming capacity of	

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							soap in hard and soft water	
	III	14-18	15 – Independence Day	04		4.CARBON AND ITS COMPOUNDS	4.2. Versatile nature of carbon	
	IV	21-26	24,25-Class Test 26-Working Saturday (Students) 26-Annual Prize Distribution	06		4.CARBON AND ITS COMPOUNDS	4.2.1 to 4.2.3 -Saturated and unsaturated carbon compounds	ES-1 (XI): 21 Aug – 25 Aug
	V	28-32	30-Raksha Bandhan 28,29 -Class Test	03		4.CARBON AND ITS COMPOUNDS	4.2.1 to 4.2.3 -Saturated and unsaturated carbon compounds 4.2.3 Will you be my friend	
Sep-23	I	01	01 -Class Test	01			REVISION	
	II	04-08	07-Janmashtami	04				Mid Term (PT-II)/
	III	11-16	16 – Working Saturday (Students)	06		Mic	d Term/ HYE Exam	HYE Date 11-23 Sep
	IV	18-23	23 – Working Saturday (Students)	06				Chapter 1: Chemical
	V	25-30	28-Milad-un-Nabi	04		4.CARBON AND ITS COMPOUNDS	4.2.4 – Homologues series of carbon compounds	Reactions and Equations
								Chapter 2: Acids, Bases
								and Salts
								Chapter 3: Metals and
								Non Metals

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Oct-23	II	02-07	02-Mahatma Gandhi's Birthday 07-Annual Prize Distribution	05		4.CARBON AND ITS COMPOUNDS	4.2.5. Nomenclature of carbon compounds	
	III	09-14	14- Working Saturday(Open House VI-XII)	06		4.CARBON AND ITS COMPOUNDS	4.3 –Chemical properties of carbon compounds	
	IV	16-20		05		4.CARBON AND ITS COMPOUNDS	.4. Ethanol and Ethanoic acid	
	V	23-27	23– Autumn Break 24- Dussehra 28-Maharishi Valmiki's Birthday	03		4.CARBON AND ITS COMPOUNDS	4.4. Ethanol and Ethanoic acid	
	VI	30-31		02		4.CARBON AND ITS COMPOUNDS	4.5 Soaps and detergents	
				*** Aı	utumn I	Break 23 Oct 2	023 ***	
Nov-23	I	01-04	01- Karwa Chouth 04 - Working Saturday (Students)	03		4.CARBON AND ITS COMPOUNDS	4.5 Soaps and detergents	
	II	06-10	07 – Annual Day	05		4.CARBON AND ITS COMPOUNDS	4.5 Soaps and detergents	

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	III	13-18	11-15 – Diwali Break	03		REVISION	REVISION	PT-III (VI-VIII): 17 Nov- 14 Dec PT-III (IX & X): 20 Nov- 30 Nov ES-2 (XI): 21 Nov-14
	IV	20-24		05		REVISION	REVISION	Dec MPB (XII): 20 Nov-30
	V	27-30	27 – Guru Nank's Birthday	03		REVISION	REVISION	Nov Nov
Dec-23	I	01-02	01,02 – Annual Athletic Meet	02		REVISION	REVISION	1.CHEMICAL
	III	04-09	09 - Sports Day  16-Working Saturday,	06		REVISION	REVISION	REACTIONS AND EQUATIONS  2.ACIDS BASES AND SALTS  3. METALS AND NONMETALS  4.CARBON AND ITS COMPOUNDS
			Open House (IX,X & XII)					
	IV	18-22	20-22 – TAFS MUN 24,25 – Christmas Holidays	05		REVISION	REVISION	
		•	*** Wint		eak fro		05 Jan 2024 ***	
Jan-24	l	08-12		05		REVISION	REVISION	Pre-Board (X & XII): 09 Jan-23 Jan

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	II	15-20	20-Working Saturday, Open House (VI- VIII, XI)	06		REVISION	REVISION	
	III	22-27	26-Republic Day 27- Farewell XII	05		REVISION	REVISION	
	IV	29-31		03		REVISION	REVISION	
Feb-24	I	01-03	01,02- Class Test  03-Working Saturday, Citation Ceremony, Open House (X& XII)	03		REVISION	REVISION	
	II	05-09	05-08- Class Test	05		REVISION	REVISION	Annual Exam Class IX  & XI - 07 Feb-21 Feb
	III	12-16		05		REVISION	REVISION	2023
	IV	19-23		05		REVISION	REVISION	
	V	26-29		04		REVISION	REVISION	
Mar-24	Annua	al Exam	Classes VI-VIII – 26 Feb	-11 Mar	2024			

Note: The examination syllabus as mentioned above is to be considered Tentative. The final syllabus for each exam will be uploaded on the website along with the Date Sheet at the time of the examination.