

QUESTION PAPER DESIGN

Subject: Chemistry (313)
Maximum Marks: 80

Course: Senior Secondary
Time: 3 Hours.

1. Weightage by Objectives			
S. No.	Objectives	Marks	% of Total Mark
1.	Knowledge	20	25
2.	Understanding	36	45
3.	Application	24	30
Total		80	100

2. Weightage to Forms of Questions			
Forms of Questions	No. of Question	Marks per question	Total Marks
Objective Type Questions			
1 Marks MCQ	16	1	16
2×12=24 Marks Objective type (with two sub-points each are of 1 marks) (Fill in the blanks, match the column, paragraph or case-based Questions, one-word questions, true False, etc.)	12	2	24
Total		28	40
Subjective Type Questions			
Very Short Answer (VSA) - 2	9*	2	18
Short Answer (SA) - 3	4**	3	12
Long Answer (LA) - 5	2***	5	10
Total		15	40
Grand Total		43	80

Note:

- ✓ *4 questions will have internal choices.
- ✓ ** 2 questions will have internal choices.
- ✓ ***2 questions will have internal choices.

3. Weightage to Content Areas

S. No.	Module	Marks
1.	Some Basic Concepts of Chemistry	04
2.	Atomic Structure and Chemical Bonding	10
3.	States of Matter	08
4.	Chemical Energetics	06
5.	Chemical Dynamics	12
6.	Chemistry of Elements	18
7.	Chemistry of Organic Compounds	18
8.	Chemistry in Everyday Life	04
Total		80

4. Difficulty level of Question Paper

Level	Marks	% of marks given
Difficult	16	20
Average	40	50
Easy	24	30
Total	80	100

Bifurcation of Syllabus (2023)**Course: Sr. Secondary****Subject: Chemistry (313)**

Total no. of Lessons= 32		
MODULE (No. & name)	TMA (40%)	Public Examination (60%)
	(No. of lessons-12)	OBJECTIVE/SUBJECTIVE (No. of lessons-20)
1. Some Basic concepts of Chemistry	-	Lesson-1 (Atoms, Molecules and Chemical Arithmetic)
2. Atomic Structure and Chemical Bonding	Lesson-3 (Periodic Table and Periodicity in Properties)	Lesson-2 (Atomic Structure) Lesson-4 (Chemical Bonding) -
3. States of Matter	Lesson-5 (The Gaseous State and Liquid State) Lesson-6 (The Solid State) Lesson-8 (Colloidal)	- Lesson-7 (Solutions)
4. Chemical Energetics	Lesson-10 (Spontaneity of Chemical Reactions)	- Lesson-9 (Chemical Thermodynamics)
5. Chemical Dynamics	Lesson-11 (Chemical Equilibrium) Lesson-14 (Chemical Kinetics) Lesson-15 (Adsorption and Catalysis)	- Lesson-12 (Ionic Equilibrium) Lesson-13 (Electrochemistry)
6. Chemistry of Elements	Lesson-16 (Occurrence and Extraction of Metals) Lesson-19 (p-Block Elements and their Compounds-I)	Lesson-17 (Hydrogen and s-Block Elements) Lesson-18 (General Characteristics of p-Block Elements) Lesson-20 (p-Block Elements and their Compounds-II) Lesson-21 d-Block and f-Block Elements Lesson-22 (Coordination Compounds)
7. Chemistry of Organic Compounds	-	Lesson-23 (Nomenclature and General Principles) Lesson-24 (Hydrocarbons) Lesson-25 (Compounds of Carbon Containing Halogens) Lesson-26 (Alcohols, Phenols and Ethers) Lesson-27 (Aldehydes, Ketones and Carboxylic Acids) Lesson-28 (Compounds of Carbon Containing Nitrogen) Lesson-29 (Biomolecules)
8. Chemistry in Everyday Life	Lesson-30 (Drugs and Medicines) Lesson-32 (Environmental Chemistry)	Lesson-31 (Soaps, Detergents and Polymers)