

Paper Code Number: 4481		2025 (1 st -A) INTERMEDIATE PART-II (12 th Class)		Roll No:	
CHEMISTRY PAPER-II GROUP-I					
TIME ALLOWED: 20 Minutes		OBJECTIVE		MAXIMUM MARKS: 17	
Q.No.1 You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that bubble in front of that question number, on bubble sheet. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question.					
S.#	QUESTIONS	A	B	C	D
1	Which statement is incorrect?	All the metals are good conductors of electricity.	All the metals are good conductors of heat.	All the metals form positive ions.	All the metals form acidic oxides.
2	The mineral ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$)	Gypsum	Dolomite	Calcite	Epsom salt
3	Tinocal is a mineral of:	Al	B	Si	C
4	Laughing gas is chemically:	NO	NO ₂	N ₂ O	N ₂ O ₂
5	Which halogen occurs naturally in a positive oxidation state?	Fluorine	Chlorine	Bromine	Iodine
6	Coordination number of Pt in $[\text{PtCl}(\text{NO}_2)(\text{NH}_3)_4]$ is:	6	4	1	2
7	The chemist who synthesized urea from ammonium cyanate, was:	Berzelius	Kolbe	Wohler	Lavoisier
8	Synthetic rubber is made by polymerization of:	Chloroform	Acetylene	Divinyl acetylene	Chloroprene
9	Which compound is most reactive one?	Ethane	Ethene	Ethyne	Benzene
10	Elimination bimolecular reaction involves:	Second order kinetics	First order kinetics	Third order kinetics	Zero order kinetics
11	Rectified spirit contains ethyl alcohol about:	80%	85%	90%	95%
12	Which will have highest boiling point?	Methanal	Ethanal	2-Hexanone	Propanal
13	Which acid is used in the manufacture of synthetic fibre?	Formic acid	Acetic acid	Oxalic acid	Carbonic acid
14	Which of these polymers is a synthetic polymer?	Animal fat	Starch	Cellulose	Polyester
15	Which three elements are needed for the healthy growth of plants?	N, S, P	N, Ca, P	N, P, K	N, K, C
16	Peroxyacetyl nitrate(PAN) is an irritant to human beings and it affects:	Eyes	Ears	Stomach	Nose
17	Fungicides are the pesticides which:	Kill insects	Control the growth of fungus	Kill plants	Kill herbs

INTERMEDIATE PART-II (12 th Class)		2025 (1 st -A)	Roll No: _____
CHEMISTRY PAPER-II GROUP-I			
TIME ALLOWED: 2.40 Hours		SUBJECTIVE	MAXIMUM MARKS: 68
NOTE: Write same question number and its parts number on answer book, as given in the question paper.			
SECTION-I			
2. Attempt any eight parts.			8 × 2 = 16
(i)	Why the metallic character increases from top to bottom in group of Metals?		
(ii)	How melting point and boiling point varied in periods?	(iii)	How Plaster of Paris is formed?
(iv)	Beryllium oxide is Amphoteric. Justify it by giving example.		
(v)	What are heterocyclic compounds? Give two examples.	(vi)	What is Carbonization?
(vii)	What is Baeyer's Test and give its reaction?		
(viii)	How alkanes are prepared from carbonyl compounds?		
(ix)	Define resonance energy. Give resonance energy of benzene.		
(x)	Write down general mechanism for halogenation of benzene.		
(xi)	Why Grignard's reagent is more reactive compound?		
(xii)	Convert ethyl bromide into n-butane.		
3. Attempt any eight parts.			8 × 2 = 16
(i)	Give equations to represent the given reactions: (a) Borax is heated with CoO (b) Al_2O_3 is heated with $NaOH$ solution		
(ii)	Why are liquid silicones preferred over ordinary organic lubricants?		
(iii)	Give the advantages of contact process for the manufacture of sulphuric acid.		
(iv)	P_2O_5 is powerful dehydrating agent. Prove it by giving any one example.		
(v)	What do you mean by denaturing of alcohol?		
(vi)	Give chemical reaction for the preparation of Bakelite.		
(vii)	Draw dimer of a carboxylic acid.	(xiii)	What are fatty acids? Give two examples?
(ix)	Give four uses of formaldehyde.	(xiv)	How Acetal is formed?
(xi)	Define condensation polymerization. Give the reaction for the formation of polyester.		
(xii)	Define epoxy resins. Give their importance/uses.		
4. Attempt any six parts.			6 × 2 = 12
(i)	Write down any four peculiar behaviour of fluorine.		2
(ii)	What are Freons and Teflon?		1+1
(iii)	Differentiate between paramagnetic and diamagnetic substances.		1+1
(iv)	How does the electronic configuration of valence shell affect binding energy?		2
(v)	Write down any four essential qualities of a good fertilizer.		2
(vi)	Briefly describe pulp washing in neutral sulphite semi-chemical process.		2
(vii)	How is oil spillage affecting the marine life?		2
(viii)	What is acid rain? How does it affect our environment?		2
(ix)	Differ _____ secondary pollutants.		2
SECTION-II			
NOTE: Attempt any three questions.			3 × 8 = 24
5.(a)	Define halides. Classify different types of halides with trends in periodic table.		4
(b)	Discuss the peculiar behaviour of lithium with respect to other members of alkali metals (any eight).		4
6.(a)	Discuss catalytic cracking and steam cracking.		4
(b)	Write down any four methods for the preparation of Benzene.		4
7.(a)	Write down structural formulas for the products that are formed when 1-butene will react with the given reagents: (i) H_2 , Pt (ii) Br_2 in CCl_4 (iii) O_3 in the presence of Ag (iv) $HOCl$		4
(b)	How is iodoform prepared using the given as starting materials? (i) Acetaldehyde (ii) Acetone (iii) Secondary alcohol (iv) Ethanol		4
8.(a)	What is Lucas test? Give its significance by reaction equations.		1+3
(b)	How does CH_3COOH react with PCl_5 ? Also give its mechanism.		1+3
9.(a)	Write any four applications of Noble gases.		4
(b)	Describe Bessemer's Process briefly.		4