

BOARD OF INTERMEDIATE AND SECONDARY EDUCATION, MULTAN.
OBJECTIVE KEY FOR INTERMEDIATE 1st ANNUAL EXAMINATION, 2025

Name of Subject: CHEMISTRY Group: 7

Q. Nos	Paper Code 4481	Correct Answer	Paper Code 4483	Correct Answer	Paper Code 4485	Correct Answer	Paper Code 4487	Correct Answer
1	D	All metals form acidic oxide	D	Polyester	C	Wholer	B	Boron
2	A	Gypsum	C	N, P, K	D	Chloroprene	C	N ₂ O
3	B	Boron	A	Eyes	B	Ethene	D	Iodine
4	C	N ₂ O	B	Control the growth of Fungus	A	Second order Kinetics	A	G
5	D	Iodine	D	All the metals form acidic oxide	D	95%	C	Wholer
6	A	G	A	Gypsum	C	2-Hexanone	B	Chloroprene
7	C	Wholer	B	Boron	B	Acetic acid	B	Ethene
8	D	Chloroprene	C	N ₂ O	D	Polyester	A	Second order Kinetics
9	B	Ethene	D	Iodine	C	N, P, K	D	95%
10	A	2nd order Kinetics	A	G	A	Eyes	C	2-Hexanone
11	D	95%	C	Wholer	B	Control the growth of Fungus	B	Acetic Acid
12	C	2-Hexanone	D	Chloroprene	D	All the metals form acidic oxide	D	Polyester
13	B	Acetic acid	B	Ethene	A	Gypsum	C	N, P, K
14	D	Polyester	A	Second order Kinetics	B	Boron	A	Eyes
15	C	N, P, K	D	95%	C	N ₂ O	B	Control the growth of Fungus
16	A	Eyes	C	2-Hexanone	D	Iodine	D	All the metals form acidic oxide
17	B	Control the growth of Fungus	B	Acetic Acid	A	G	A	Gypsum
18								
19								
20								
Cross Check	A B C D		A B C D		A B C D		A B C D	
Total	4445		4445		4445		4445	

سرٹیفکیٹ یافتہ سرچے مارکنگ Key

محترم ممبران! یہ موضوعی (Subjective & Objective) کو بطور تفریق چیک کر لیا ہے۔ یہ پرچہ Syllabus کے تین مطابق Set کیا گیا ہے۔ اس سوالیہ پرچہ میں کسی قسم کی کوئی غلطی نہ ہے۔ ہم نے سوالیہ پرچہ اردو اور انگریزی Version بھی چیک کر لیا ہے۔ یہ Version آپس میں مطابقت رکھتے ہیں۔ نیز اس پرچہ کی سرچش (MCQs) Key کی بہت تصدیق کی جاتی ہے کہ اس میں کسی قسم کی کوئی غلطی نہ ہے۔ مزید یہ کہ ہم نے Key بنانے سے متعلق دفتر کی جانب سے تیار کردہ ہدایات وصول کر کے ان کو بخوبی مطالعہ کر لیا ہے اور ان کی روشنی میں Key بنائی ہے۔ نیز سب ایگزامینرز کیلئے تفصیلی مارکنگ ہدایات / مارکنگ شیٹ / Rubrics بھی تیار کر دی گئی ہیں۔

Prepared & Checked By:

Dated:

08-05-2025

S.#	Name	Designation	Institution	Mobile No	Signature
1	Ghulam Qadir Hussain	Assistant professor	Govt. Graduate College Multan Road Burewala	0334-7196354	
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Re-Checked By: ہم نے درج بالا سوالیہ پرچہ (انشائیہ + موضوعی) کی سرچش "Key" اور ہدایات کے حوالہ سے مکمل طور پر چکی کر لی ہے۔ کسی قسم کی کوئی غلطی نہ ہے۔

1	Dr Nadia Anif	AP	Govt. Graduate College of Science Multan	03007189257	
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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.	(viii)	What are fatty acids? Give two examples?
(ix)	Give four uses of formaldehyde.	(x)	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)	Differentiate between primary and 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

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 ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) has the general name:	Gypsum	Dolomite	Calcite	Epsom salt
3	Tinical is a mineral of:	<i>Al</i>	<i>B</i>	<i>Si</i>	<i>C</i>
4	Laughing gas is chemically:	<i>NO</i>	<i>NO₂</i>	<i>N₂O</i>	<i>N₂O₄</i>
5	Which halogen occurs naturally in a positive oxidation state?	Fluorine	Chlorine	Bromine	Iodine
6	Coordination number of <i>Pt</i> 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	Wholer	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?	<i>N, S, P</i>	<i>N, Ca, P</i>	<i>N, P, K</i>	<i>N, K, C</i>
16	Peroxyacetylnitrate(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

Paper Code Number: 4483		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 of these polymers is a synthetic polymer?	Animal fat	Starch	Cellulose	Polyester
2	Which three elements are needed for the healthy growth of plants?	<i>N, S, P</i>	<i>N, Ca, P</i>	<i>N, P, K</i>	<i>N, K, C</i>
3	Peroxyacetylnitrate(PAN) is an irritant to human beings and it affects:	Eyes	Ears	Stomach	Nose
4	Fungicides are the pesticides which:	Kill insects	Control the growth of fungus	Kill plants	Kill herbs
5	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.
6	The mineral ($CaSO_4 \cdot 2H_2O$) has the general name:	Gypsum	Dolomite	Calcite	Epsom salt
7	Tinical is a mineral of:	<i>Al</i>	<i>B</i>	<i>Si</i>	<i>C</i>
8	Laughing gas is chemically:	<i>NO</i>	<i>NO₂</i>	<i>N₂O</i>	<i>N₂O₄</i>
9	Which halogen occurs naturally in a positive oxidation state?	Fluorine	Chlorine	Bromine	Iodine
10	Coordination number of <i>Pt</i> in $[PtCl(NO_2)(NH_3)_4]$ is:	6	4	1	2
11	The chemist who synthesized urea from ammonium cyanate, was:	Berzelius	Kolbe	Wohler	Lavoisier
12	Synthetic rubber is made by polymerization of:	Chloroform	Acetylene	Divinyl acetylene	Chloroprene
13	Which compound is most reactive one?	Ethane	Ethene	Ethyne	Benzene
14	Elimination bimolecular reaction involves:	Second order kinetics	First order kinetics	Third order kinetics	Zero order kinetics
15	Rectified spirit contains ethyl alcohol about:	80%	85%	90%	95%
16	Which will have highest boiling point?	Methanal	Ethanal	2-Hexanone	Propanal
17	Which acid is used in the manufacture of synthetic fibre?	Formic acid	Acetic acid	Oxalic acid	Carbonic acid

Paper Code Number: 4485		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	The chemist who synthesized urea from ammonium cyanate, was:	Berzelius	Kolbe	Wohler	Lavoisier
2	Synthetic rubber is made by polymerization of:	Chloroform	Acetylene	Divinyl acetylene	Chloroprene
3	Which compound is most reactive one?	Ethane	Ethene	Ethyne	Benzene
4	Elimination bimolecular reaction involves:	Second order kinetics	First order kinetics	Third order kinetics	Zero order kinetics
5	Rectified spirit contains ethyl alcohol about:	80%	85%	90%	95%
6	Which will have highest boiling point?	Methanal	Ethanal	2-Hexanone	Propanal
7	Which acid is used in the manufacture of synthetic fibre?	Formic acid	Acetic acid	Oxalic acid	Carbonic acid
8	Which of these polymers is a synthetic polymer?	Animal fat	Starch	Cellulose	Polyester
9	Which three elements are needed for the healthy growth of plants?	N, S, P	N, Ca, P	N, P, K	N, K, C
10	Peroxyacetyl nitrate(PAN) is an irritant to human beings and it affects:	Eyes	Ears	Stomach	Nose
11	Fungicides are the pesticides which:	Kill insects	Control the growth of fungus	Kill plants	Kill herbs
12	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.
13	The mineral ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) has the general name:	Gypsum	Dolomite	Calcite	Epsom salt
14	Tincol is a mineral of:	Al	B	Si	C
15	Laughing gas is chemically:	NO	NO ₂	N ₂ O	N ₂ O ₄
16	Which halogen occurs naturally in a positive oxidation state?	Fluorine	Chlorine	Bromine	Iodine
17	Coordination number of Pt in $[\text{PtCl}(\text{NO}_2)(\text{NH}_3)_4]$ is:	6	4	1	2

Paper Code Number: 4487		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	Tinical is a mineral of:	Al	B	Si	C
2	Laughing gas is chemically:	NO	NO ₂	N ₂ O	N ₂ O ₄
3	Which halogen occurs naturally in a positive oxidation state?	Fluorine	Chlorine	Bromine	Iodine
4	Coordination number of Pt in [PtCl(NO ₂)(NH ₃) ₄] is:	6	4	1	2
5	The chemist who synthesized urea from ammonium cyanate, was:	Berzelius	Kolbe	Wholer	Lavoisier
6	Synthetic rubber is made by polymerization of:	Chloroform	Acetylene	Divinyl acetylene	Chloroprene
7	Which compound is most reactive one?	Ethane	Ethene	Ethyne	Benzene
8	Elimination bimolecular reaction involves:	Second order kinetics	First order kinetics	Third order kinetics	Zero order kinetics
9	Rectified spirit contains ethyl alcohol about:	80%	85%	90%	95%
10	Which will have highest boiling point?	Methanal	Ethanal	2-Hexanone	Propanal
11	Which acid is used in the manufacture of synthetic fibre?	Formic acid	Acetic acid	Oxalic acid	Carbonic acid
12	Which of these polymers is a synthetic polymer?	Animal fat	Starch	Cellulose	Polyester
13	Which three elements are needed for the healthy growth of plants?	N, S, P	N, Ca, P	N, P, K	N, K, C
14	Peroxyacetylnitrate(PAN) is an irritant to human beings and it affects:	Eyes	Ears	Stomach	Nose
15	Fungicides are the pesticides which:	Kill insects	Control the growth of fungus	Kill plants	Kill herbs
16	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.
17	The mineral (CaSO ₄ .2H ₂ O) has the general name:	Gypsum	Dolomite	Calcite	Epsom salt

Name of Subject. CHEMISTRY Group. II

Group. ... II

ہم نے مضامین کی مشق پرچہ (Subjective & Objective) کو بنظر عمیق چیک کر لیا ہے۔ یہ پرچہ Syllabus کے عین مطابق Set کیا گیا ہے۔ اس سوالیہ پرچہ میں کسی قسم کی کوئی غلطی نہ ہے۔ ہم نے سوالیہ پرچہ اور انگریزی Version بھی چیک کر لیا ہے۔ یہ Version آپس میں مطابقت رکھتے ہیں۔ نیز اس پرچہ کی مروری Key (MCQs) کی بدلتہ تصدیق کی جاتی ہے کہ اس میں بھی کسی قسم کی کوئی غلطی نہ ہے۔ مزید یہ کہ ہم نے Key نامے سے متعلق دفتر کی جانب سے تیار کردہ ہدایات کی تعمیل کی ہے۔ نیز سب ایگزامینرز کیلئے تفصیلی مارکنگ ہدایات / مارکنگ سکیم / Rubrics بھی تیار کر دی گئی ہیں۔

Dated:

ہم نے درج بالا پیرچہ (انشائیہ + معروضی) "Key" اور ہدایات کے حوالہ سے مکمل طور پر تسلیم کر لی ہے۔ کسی قسم کی غلطی نہ ہے۔ Re-Checked By				
1	Dr. Nadia Arif	A.P	Govt. Graduate College of Science Multan	03007189257
2	Dr. M. Tariq Splezal	Associate Professor	Govt. Graduate College Civil Lines, Multan	0334-6070969

INTERMEDIATE PART-II (12 th Class)		2025 (1 st -A)	Roll No: _____
CHEMISTRY PAPER-II GROUP-II			
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)	What is Lanthanide Contraction?	(ii)	Define hydration energy of ions with an example.
(iii)	Why lime is added to acidic soil?	(iv)	Why 2% Gypsum is added to cement?
(v)	Define Meta directing group with example.	(vi)	Define Metamerism. Give an example.
(vii)	What is octane number? How is it improved?	(viii)	How will you prepare acetone from propyne?
(ix)	How ethyne is converted into benzene?	(x)	How Maleic acid is prepared from benzene?
(xi)	What is Wurtz synthesis? Give reaction.		
(xii)	Write down the main factors on which reactivity of alkyl halide depends.		
3. Attempt any eight parts.			8 × 2 = 16
(i)	How will you convert boric acid into borax and borax into boric acid?		
(ii)	Give the four names and formulas of different acids of boron.		
(iii)	Why is SO_3 dissolved in H_2SO_4 , not in water?		
(iv)	Write any four uses of HNO_3 .		
(v)	Write down formulas of (a) Picric acid (b) Methoxy benzene		
(vi)	Show reactions to prepare ethers by Williamson's synthesis.		
(vii)	Define amino acids. Give two examples.		
(viii)	What is glacial acetic acid?		
(ix)	Give general mechanism of acid catalysed addition reactions for aldehydes.		
(x)	What is sodium nitroprusside test?		
(xi)	Define Saponification number and iodine number.		
(xii)	What is acidic number?		
4. Attempt any six parts.			6 × 2 = 12
(i)	Why HF is weaker acid than HCl ? Justify.		2
(ii)	Write down four peculiar behaviour of fluorine.		2
(iii)	How chromate ions are converted into dichromate ions?		2
(iv)	Why does damaged tin plated iron get rusted quickly?		2
(v)	What are macronutrients? Name any four macronutrients.		2
(vi)	Briefly describe pulp washing in neutral sulphite semi-chemical process.		2
(vii)	Name the components of environment. Briefly describe any one.		1+1
(viii)	What is acid rain? How does it affect our environment?		2
(ix)	Briefly describe incineration of Municipal Solid Waste.		2
SECTION-II			
NOTE: Attempt any three questions.			3 × 8 = 24
5.(a)	What are the oxides? Describe their classification on the basis of their acidic and basic behaviour.		1+3
(b)	Describe with diagram the manufacturing of caustic soda by diaphragm cell.		1+3
6.(a)	What is orbital hybridization? Explain sp^3 Hybridization in Methane molecule.		4
(b)	Define Alkylation, give one example and explain mechanism of reaction.		4
7.(a)	How will you prepare sodium formate and sodium benzoate through Cannizzaro's reaction? Give mechanisms.		4
(b)	How will you synthesize the following compounds starting from ethyne? (i) Oxalic acid (ii) Ethane (iii) Methyl nitrile (iv) Benzene		4
8.(a)	How ethanol is prepared by fermentation method from molasses and from starch? Explain it.		2+2
(b)	How will you prepare acetic acid by using the following: (i) From alkane nitriles (ii) By the hydrolysis of esters		2+2
9.(a)	Write Beckmann's method for the manufacturing of Bleaching Powder.		4
(b)	Describe open hearth process briefly.		4

Paper Code Number: 4482		2025 (1 st -A) INTERMEDIATE PART-II (12 th Class)		Roll No:	
CHEMISTRY PAPER-II GROUP-II					
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	Mark the correct option/statement:	Cl^- (ion) and Cl (atom) are equal in size	Na^+ is larger than Na atom	Cl^- is smaller than Cl atom	Na^+ is smaller than Na atom
2	Which element is deposited at the cathode during the electrolysis of brine in diaphragm cell?	H_2	Na	Cl_2	O_2
3	Boric acid cannot be used:	An antiseptic in medicine	For washing eyes	In soda bottles	For enamels and glazes
4	Laughing gas is chemically:	NO	N_2O	NO_2	N_2O_4
5	Hydrogen bond is the strongest between the molecules of:	HI	HCl	HBr	HF
6	Group <u>VII</u> B of transition elements contains:	Zn, Cd, Hg	Fe, Ru, Os	Cr, Mo, W	Mn, Te, Re
7	Linear shape is associated with which set of hybrid orbitals?	sp	sp^2	sp^3	dsp^2
8	Vinyl acetylene combines with HCl to form:	Polyacetylene	Benzene	Chloroprene	Divinyl acetylene
9	The electrophile in aromatic sulphonation is:	SO_3	H_2SO_4	SO_3^+	HSO_4^-
10	For which mechanisms, the first step involved is the same:	$E1$ and $E2$	$E1$ and S_N1	S_N1 and $E2$	$E2$ and S_N2
11	Which compound is called a universal solvent?	H_2O	CH_3OH	C_2H_5OH	CH_3-O-CH_3
12	Which of the given compounds will not give iodoform test?	Acetaldehyde	Acetone	Butanone	3-pentanone
13	Acetamide is prepared by:	Heating ethyl acetate	Heating methyl cyanide	Heating ammonium acetate	Hydrolysis of methyl cyanide
14	Which of these polymers is an addition polymer?	Nylon 6, 6	Polystyrene	Terylene	Epoxy resin
15	Micro-nutrients are required in quantity ranging from:	6 – 200 g	4 – 40 g	6 – 200 kg	4 – 40 kg
16	Newspaper can be recycled again and again by how many times?	2	3	5	4
17	The pH range of the acid rain is:	7 – 6.5	6.5 – 6	6 – 5.6	Less than 5

Paper Code Number: 4484		2025 (1 st -A) INTERMEDIATE PART-II (12 th Class)		Roll No:	
CHEMISTRY PAPER-II GROUP-II					
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	Linear shape is associated with which set of hybrid orbitals?	sp	sp^2	sp^3	dsp^2
2	Vinyl acetylene combines with HCl to form:	Polyacetylene	Benzene	Chloroprene	Divinyl acetylene
3	The electrophile in aromatic sulphonation is:	SO_3	H_2SO_4	SO_3^{+}	HSO_4^{-}
4	For which mechanisms, the first step involved is the same:	$E1$ and $E2$	$E1$ and S_N1	S_N1 and $E2$	$E2$ and S_N2
5	Which compound is called a universal solvent?	H_2O	CH_3OH	C_2H_5OH	$CH_3 - O - CH_3$
6	Which of the given compounds will not give iodoform test?	Acetaldehyde	Acetone	Butanone	3-pentanone
7	Acetamide is prepared by:	Heating ethyl acetate	Heating methyl cyanide	Heating ammonium acetate	Hydrolysis of methyl cyanide
8	Which of these polymers is an addition polymer?	Nylon 6, 6	Polystyrene	Terylene	Epoxy resin
9	Micro-nutrients are required in quantity ranging from:	6 – 200 g	4 – 40 g	6 – 200 kg	4 – 40 kg
10	Newspaper can be recycled again and again by how many times?	2	3	5	4
11	The pH range of the acid rain is:	7 – 6.5	6.5 – 6	6 – 5.6	Less than 5
12	Mark the correct option/statement:	Cl^{-} (ion) and Cl (atom) are equal in size	Na^{+} is larger than Na atom	Cl^{-} is smaller than Cl atom	Na^{+} is smaller than Na atom
13	Which element is deposited at the cathode during the electrolysis of brine in diaphragm cell?	H_2	Na	Cl_2	O_2
14	Boric acid cannot be used:	An antiseptic in medicine	For washing eyes	In soda bottles	For enamels and glazes
15	Laughing gas is chemically:	NO	N_2O	NO_2	N_2O_4
16	Hydrogen bond is the strongest between the molecules of:	HI	HCl	HBr	HF
17	Group VIB of transition elements contains:	Zn, Cd, Hg	Fe, Ru, Os	Cr, Mo, W	Mn, Te, Re

Paper Code Number: 4486		2025 (1 st -A) INTERMEDIATE PART-II (12 th Class)		Roll No:	
CHEMISTRY PAPER-II GROUP-II					
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 of the given compounds will not give iodoform test?	Acetaldehyde	Acetone	Butanone	3-pentanone
2	Acetamide is prepared by:	Heating ethyl acetate	Heating methyl cyanide	Heating ammonium acetate	Hydrolysis of methyl cyanide
3	Which of these polymers is an addition polymer?	Nylon 6, 6	Polystyrene	Terylene	Epoxy resin
4	Micro-nutrients are required in quantity ranging from:	6 – 200 g	4 – 40 g	6 – 200 kg	4 – 40 kg
5	Newspaper can be recycled again and again by how many times?	2	3	5	4
6	The <i>pH</i> range of the acid rain is:	7 – 6.5	6.5 – 6	6 – 5.6	Less than 5
7	Mark the correct option/statement:	Cl^- (ion) and Cl (atom) are equal in size	Na^+ is larger than Na atom	Cl^- is smaller than Cl atom	Na^+ is smaller than Na atom
8	Which element is deposited at the cathode during the electrolysis of brine in diaphragm cell?	H_2	Na	Cl_2	O_2
9	Boric acid cannot be used:	An antiseptic in medicine	For washing eyes	In soda bottles	For enamels and glazes
10	Laughing gas is chemically:	NO	N_2O	NO_2	N_2O_4
11	Hydrogen bond is the strongest between the molecules of:	HI	HCl	HBr	HF
12	Group <u>VI</u> B of transition elements contains:	Zn, Cd, Hg	Fe, Ru, Os	Cr, Mo, W	Mn, Te, Re
13	Linear shape is associated with which set of hybrid orbitals?	sp	sp^2	sp^3	dsp^2
14	Vinyl acetylene combines with HCl to form:	Polyacetylene	Benzene	Chloroprene	Divinyl acetylene
15	The electrophile in aromatic sulphonation is:	SO_3	H_2SO_4	SO_3^+	HSO_4^-
16	For which mechanisms, the first step involved is the same:	$E1$ and $E2$	$E1$ and S_N1	S_N1 and $E2$	$E2$ and S_N2
17	Which compound is called a universal solvent?	H_2O	CH_3OH	C_2H_5OH	$CH_3 - O - CH_3$

Paper Code Number: 4488		2025 (1 st -A) INTERMEDIATE PART-II (12 th Class)		Roll No:	
CHEMISTRY PAPER-II GROUP-II					
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	Micro-nutrients are required in quantity ranging from:	6 – 200 g	4 – 40 g	6 – 200 kg	4 – 40 kg
2	Newspaper can be recycled again and again by how many times?	2	3	5	4
3	The <i>pH</i> range of the acid rain is:	7 – 6.5	6.5 – 6	6 – 5.6	Less than 5
4	Mark the correct option/statement:	<i>Cl</i> ⁻ (ion) and <i>Cl</i> (atom) are equal in size	<i>Na</i> ⁺ is larger than <i>Na</i> atom	<i>Cl</i> ⁻ is smaller than <i>Cl</i> atom	<i>Na</i> ⁺ is smaller than <i>Na</i> atom
5	Which element is deposited at the cathode during the electrolysis of brine in diaphragm cell?	<i>H</i> ₂	<i>Na</i>	<i>Cl</i> ₂	<i>O</i> ₂
6	Boric acid cannot be used:	An antiseptic in medicine	For washing eyes	In soda bottles	For enamels and glazes
7	Laughing gas is chemically:	<i>NO</i>	<i>N</i> ₂ <i>O</i>	<i>NO</i> ₂	<i>N</i> ₂ <i>O</i> ₄
8	Hydrogen bond is the strongest between the molecules of:	<i>HI</i>	<i>HCl</i>	<i>HBr</i>	<i>HF</i>
9	Group <i>VI B</i> of transition elements contains:	<i>Zn, Cd, Hg</i>	<i>Fe, Ru, Os</i>	<i>Cr, Mo, W</i>	<i>Mn, Te, Re</i>
10	Linear shape is associated with which set of hybrid orbitals?	<i>sp</i>	<i>sp</i> ²	<i>sp</i> ³	<i>dsp</i> ²
11	Vinyl acetylene combines with <i>HCl</i> to form:	Polyacetylene	Benzene	Chloroprene	Divinyl acetylene
12	The electrophile in aromatic sulphonation is:	<i>SO</i> ₃	<i>H</i> ₂ <i>SO</i> ₄	<i>SO</i> ₃ ⁺	<i>HSO</i> ₄ ⁻
13	For which mechanisms, the first step involved is the same:	<i>E</i> 1 and <i>E</i> 2	<i>E</i> 1 and <i>S</i> _N 1	<i>S</i> _N 1 and <i>E</i> 2	<i>E</i> 2 and <i>S</i> _N 2
14	Which compound is called a universal solvent?	<i>H</i> ₂ <i>O</i>	<i>CH</i> ₃ <i>OH</i>	<i>C</i> ₂ <i>H</i> ₅ <i>OH</i>	<i>CH</i> ₃ – <i>O</i> – <i>CH</i> ₃
15	Which of the given compounds will not give iodoform test?	Acetaldehyde	Acetone	Butanone	3-pentanone
16	Acetamide is prepared by:	Heating ethyl acetate	Heating methyl cyanide	Heating ammonium acetate	Hydrolysis of methyl cyanide
17	Which of these polymers is an addition polymer?	Nylon 6, 6	Polystyrene	Terylene	Epoxy resin