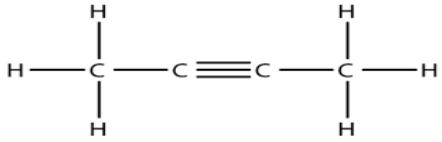
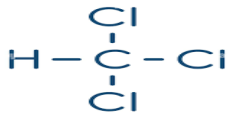
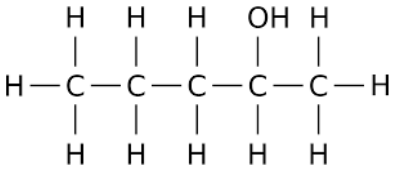
ICSE 2026 SPECIMEN

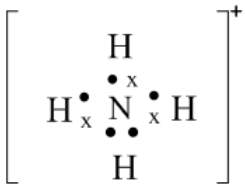
DRAFT MARKING SCHEME – CHEMISTRY (SCIENCE PAPER 2)

Question 1		[15x1]
(i)	(c) NaCl	
(ii)	(d) ammonium sulphate	
(iii)	(c) Both (A) and (R) are the true and (R) is the correct explanation of (A).	
(iv)	(b) H_3O^+	
(v)	(c) 3 and 4	
(vi)	(d) Potassium sulphite	
(vii)	(c) 44.8L	
(viii)	(d) Aluminium oxide	
(ix)	(b) 2	
(x)	(d) Na	
(xi)	(d) 6 2	
(xii)	(d) Both positive and negative ions	
(xiii)	(c) They have the same functional group.	
(xiv)	(c) 1:10	
(xv)	(d) Copper ions from the anode move to the cathode and get deposited as pure Copper.	
Question 2		
(i)	(a) (1) reddish brown deposit/ pink deposit/ mass increases (2) As anode released Copper ions the concentration of copper ions does not decrease (b) Anode should be made up of Nickel and the electrolyte should be aq. Nickel sulphate or any salt solution of Nickel (c) $Ag \rightarrow Ag^+ + e^-$	[2+2+1]
(ii)	(a) Coordinate bond (b) Normal salt (c) Substitution	[5x1]

	(d) ionisation potential (e) alloy	
(iii)	(a) Hydrogen (b) pale blue (c) one (d) more (e) ore	[5x1]
(iv)	(a) 3 (b) 4 (c) 2 (d) 5 (e) 1	[5x1]
(v)	(a) 1. propanol 2. pentene (b) 1. but-2-yne  2. 1,1,1,trichloro methane  3. pentan -2-ol 	[3+2]
Question 3		
(i)	(a) Yellow oily explosive liquid (b) reddish-brown gas/ a gas which rekindles a glowing splinter/ a residue which is yellow when hot and white when cold is formed	[2]

(ii)	(a) Because copper oxide is reduced to copper (b) because quick lime reacts with hydrogen chloride gas	[2]
(iii)	(a) X has more oxidising power than Y (b) X will be more electronegative than Y (c) X will be placed to the right of Y	[3]
(iv)	(a) $2NH_4Cl + Ca(OH)_2 \rightarrow CaCl_2 + 2H_2O + 2NH_3$ (b) $2HNO_3 + ZnCO_3 \rightarrow Zn(NO_3)_2 + H_2O + CO_2$ (c) $H_2SO_4 + CuSO_4.5H_2O \rightarrow CuSO_4 + 5H_2O + H_2SO_4$	[3]
Question 4		
(i)	(a) Aluminium (b) Copper	[2]
(ii)	(a) $NaCl + \text{conc. } H_2SO_4 \rightarrow NaHSO_4 + HCl$ (b) $C_2H_4 + Br_2 \rightarrow C_2H_4Br_2$	[2]
(iii)	(a) Nitrogen dioxide (b) lead ion (c) Lead nitrate	[3]
(iv)	(a) Esterification (b) dehydrating agent (c) Fruity smell is obtained	[3]
Question 5		
(i)	Q is Calcium carbonate or Calcium bicarbonate $CaCO_3 + 2HNO_3 \rightarrow Ca(NO_3)_2 + H_2O + CO_2$ OR $Ca(HCO_3)_2 + 2HNO_3 \rightarrow Ca(NO_3)_2 + 2H_2O + 2CO_2$	[2]
(ii)	3.2 g of oxygen contains 6.023×10^{22} molecules so 4.4g of CO_2 will contain 6.023×10^{22} molecules Answer 4.4g of CO_2	[2]

(iii)	(a) Oxidizing property (b) Acidic property (c) dehydrating property	[3]
(iv)	(a) $CaC_2 + 2H_2O \rightarrow Ca(OH)_2 + C_2H_2$ (b) $CH_3COOH + C_2H_5OH \rightarrow CH_3COOC_2H_5 + H_2O$ (c) $NaNO_3 + \text{conc. } H_2SO_4 \rightarrow NaHSO_4 + 2HNO_3$	[3]
Question 6		
(i)	(a) White precipitate is formed. (b) blue precipitate dissolves to form an inky blue solution.	[2]
(ii)	(a) $CuCO_3 + H_2SO_4 \rightarrow CuSO_4 + H_2O + CO_2$ (b) $Zn + 2NaOH \rightarrow Na_2ZnO_2 + H_2$	[2]
(iii)	(a) 252 g of Ammonium dichromate = 1mole 126 g of Ammonium dichromate = 0.5 moles (b) 252 g of ammonium dichromate gives 152 g of chromic oxide 126 g of ammonium dichromate provides 152×126/ 252 = 76 g of chromic oxide (c) 252 g of ammonium dichromate produces 22.4 l of nitrogen 126 g of ammonium dichromate produces 22.4×126/ 252 = 11.2 l of nitrogen	[3]
(iv)	(a) Hydrogen (b) Oxygen (c) Silver Nitrate	[3]
Question 7		
(i)	(a) Nitric Acid is a very strong oxidising agent and hence oxidises hydrogen to water. So, it is not used for obtaining hydrogen from metals. (b) because it is not made fully of silver only its top coating is of silver	[2]
(ii)	(a) Cryolite (b) $Al^{3+} + 3e^- \rightarrow Al$	[2]

(iii)	(a) $AlN + 3H_2O \rightarrow Al(OH)_3 + NH_3$ (b) $C + 4HNO_3 \rightarrow CO_2 + 2H_2O + 4NO_2$ (c) C_2H_5Cl + aq. NaOH $\rightarrow$ $C_2H_5OH + NaCl$	[3]
(iv)	(a) X (b) Z (c) Y	[3]
Question 8		
(i)	(a) No, both will liberate hydrogen gas which burns with a pop sound (b) Yes, white ppt. will be formed with lead nitrate but no ppt. is formed with calcium nitrate/ or no visible reaction	[2]
(ii)		[2]
(iii)	A = $Zn + H_2SO_4 \rightarrow ZnSO_4 + H_2$ B = $Zn + S \rightarrow ZnS$ C = $ZnSO_4 + 2NaOH \rightarrow Zn(OH)_2 + Na_2SO_4$ or with NH_4OH	[3]
(iv)	(a) M (b) N (c) L	[3]