

**Marking Scheme**  
**Strictly Confidential**  
**(For Internal and Restricted use only)**  
**Senior Secondary School Examination, 2026 (XII<sup>th</sup>)**  
**SUBJECT NAME: - CHEMISTRY (043), (Q.P. CODE 56B)**

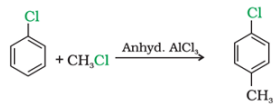
**General Instructions: -**

<b>1</b>	The CBSE has decided to introduce On Screen Marking (OSM) for the evaluation of Class XII answer Book with the 2026 Examination.
<b>2</b>	You are aware that evaluation is the most important process in the actual and correct assessment of the candidates. A small mistake in evaluation may lead to serious problems which may affect the future of the candidates, education system and teaching profession. To avoid mistakes, it is requested that before starting evaluation, you must read and understand the spot evaluation guidelines carefully.
<b>3</b>	<b>“Evaluation policy is a confidential policy as it is related to the confidentiality of the examinations conducted, evaluation done and several other aspects. Its leakage to public in any manner could lead to derailment of the examination system and affect the life and future of millions of candidates. Sharing this policy/document to anyone, publishing in any magazine and printing in Newspaper/Website, etc. may invite action under various rules of the Board and IPC.”</b>
<b>4</b>	Evaluation is to be done as per instructions provided in the Marking Scheme. It should not be done according to one’s own interpretation or any other consideration. Marking Scheme should be strictly adhered to and religiously followed. <b>However, while evaluating, answers which are based on latest information or knowledge and/or are innovative, they may be assessed for their correctness otherwise and due marks be awarded to them. In Class-XII, while evaluating two competency-based questions, please try to understand given answer and even if reply is not from marking scheme but correct competency is enumerated by the candidate, due marks should be awarded.</b>
<b>5</b>	The Marking scheme carries only suggested value points for the answers. These are in the nature of Guidelines only and do not constitute the complete answer. The students can have their own expression and if the expression is correct, the due marks should be awarded accordingly.
<b>6</b>	The Head-Examiner must go through the first five answer books evaluated by each evaluator on the first day, to ensure that evaluation has been carried out as per the instructions given in the Marking Scheme. If there is any variation, the same should be zero after deliberation and discussion. The remaining answer books meant for evaluation shall be given only after ensuring that there is no significant variation in the marking of individual evaluators.
<b>7</b>	Evaluators will mark ( ✓ ) wherever answer is correct. For wrong answer CROSS ‘X’ be marked. Evaluators will not put right (✓) while evaluating which gives an impression that answer is correct and no marks are awarded. <b>This is most common mistake which evaluators are committing.</b>
<b>8</b>	If a question has parts, please award marks on the right-hand side for each part in the OSM Portal. Marks awarded for different parts of the question will be totaled up by the OSM System.
<b>9</b>	If a question does not have any parts, marks must be awarded in the left-hand margin in the OSM Portal. This may also be followed strictly.

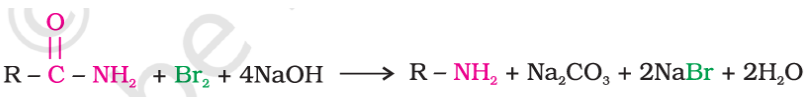
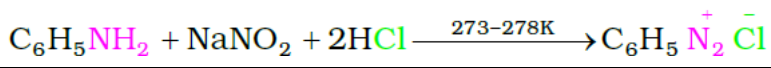
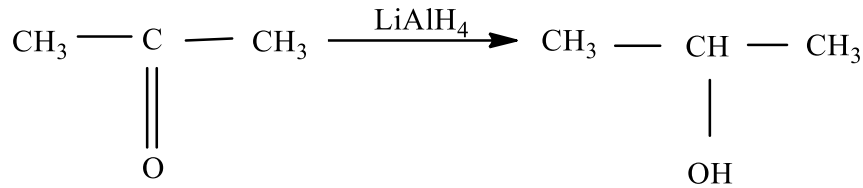
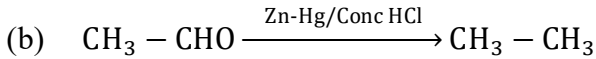
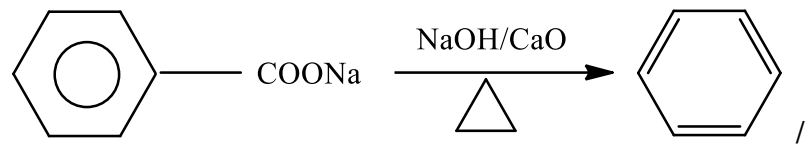
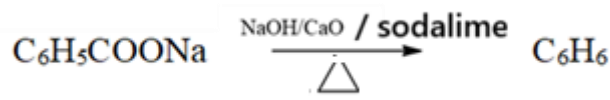
10	No marks to be deducted for the cumulative effect of an error. It should be penalized only once.
11	A full scale of marks _____ (example 0 to 80/70/60/50/40/30 marks as given in Question Paper) has to be used. Please do not hesitate to award full marks if the answer deserves it.
12	Every examiner has to necessarily do evaluation work for full working hours i.e., 8 hours every day and evaluate 20 answer books per day in main subjects and 25 answer books per day in other subjects (Details are given in Spot Guidelines). This is in view of the reduced syllabus and number of questions in question paper.
13	<p>Ensure that you do not make the following common types of errors committed by the Examiner in the past :-</p> <ul style="list-style-type: none"> <li>• Answers marked as correct, but marks not awarded. (Ensure that the right tick mark is correctly and clearly indicated. It should merely be a line. Same is with the X for incorrect answer.)</li> <li>• Half or a part of answer marked correct and the rest as wrong, but no marks awarded.</li> </ul>
14	While evaluating the answer books if the answer is found to be totally incorrect, it should be marked as cross (X) and awarded zero (0) Marks.
15	The Examiners should acquaint themselves with the guidelines given in the <b>“Guidelines for Spot Evaluation”</b> before starting the actual evaluation.
16	The candidates are entitled to obtain photocopy of the Answer Book on request on payment of the prescribed processing fee. All Examiners/Additional Head Examiners/Head Examiners are once again reminded that they must ensure that evaluation is carried out strictly as per value points for each answer as given in the Marking Scheme.
17	<b>If a candidate attempts both alternatives/options in a question where only one option/ alternative is required to be attempted, the Evaluator shall award marks in both the options. The system will take the higher of two scores and disregard the other response.</b>
18	<b>In a question having two options/alternatives, if a candidate has attempted only one, then the evaluator shall mark “NA” (Not attempted) against the option that has not been attempted by the candidate.</b>

**MARKING SCHEME 2026**  
**CHEMISTRY (VISUALLY IMPAIRED) (Subject Code-043)**  
**(PAPER CODE : 56B)**

Q.No.	EXPECTED OUTCOMES/VALUE POINTS	Marks
	<b>SECTION - A</b>	
1.	(B)	1
2.	(C)	1
3.	(A)	1
4.	(B)	1
5.	(A)	1
6.	(D)	1
7.	(C)	1
8.	(A)	1
9.	(D)	1
10.	(B)	1
11.	(C)	1
12.	(A)	1
13.	(B)	1
14.	(C)	1
15.	(D)	1
16.	(A)	1
	<b>SECTION-B</b>	
17.	<p>The partial vapour pressure of each component is directly proportional to its mole fraction.</p> <p>1. Solute-solvent interaction is same as pure solute or pure solvent interactions.</p> <p>2. <math>\Delta_{\text{mix}} H = 0</math></p> <p>3. <math>\Delta_{\text{mix}} V = 0</math></p> <p style="text-align: right;">(any two)</p>	<p>1</p> <p><math>\frac{1}{2} + \frac{1}{2}</math></p>

18.	Order	Molarity		1+1
	1. Determined experimentally. 2. Can be zero or fractional. 3. Valid for complex reaction.	1. Not determined experimentally. 2. Can't be zero/fractional. 3. Not valid for complex reaction.		
	(any two)			
19.	(a) Ambidentate ligand is a ligand which has two different donor atoms and either of the two ligates in the complex.			1
	(b) The energy used to split degenerate d-orbital into two sets $t_{2g}$ and $e_g$ .			1
20.	(a) But-1-ene is formed / $\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{Cl} \xrightarrow{\text{alc.KOH}} \text{CH}_3\text{-CH}_2\text{-CH=CH}_2$			1
	(b) p-chlorotoluene / 1-chloro - 4 - methylbenzene is formed/ 			1
21.	(a)• Amino acids which are not synthesized in our body and are required in our diet.			1
	• Because of its zwitter ionic nature.			1
	OR			
21.	(b)(i) The linkage which joins two amino acids through – CONH – bond.			1
	(ii) Nucleotide is Base + sugar + phosphate.			1
	SECTION-C			
22.	$M = \frac{W_B}{M_B} \times \frac{1000}{V}$			1  $\frac{1}{2}$  1  $\frac{1}{2}$
	$M = \frac{20 \text{ g}}{166 \text{ gmol}^{-1}} \times \frac{1000}{100} \times 1.2 \text{ g L}^{-1}$			
	$M = \frac{240}{166} = 1.4M$			
	$m = \frac{W_B}{M_B} \times \frac{1000}{W_A}$			
	$m = \frac{20}{166} \times \frac{1000}{80}$			
	$m = \frac{250}{166} = 1.5 \text{ m or } 1.5 \text{ mol kg}^{-1}$			

23.	<ul style="list-style-type: none"><li>Conductance of one unit volume of solution kept between two platinum electrodes with unit area of cross section and at a distance of unit length.</li><li>Molar conductivity is the conductivity observed in 1 molar solution</li><li>Due to decrease in number of ions per unit volume.</li></ul>	1  1 1								
24.	$t_{1/2} = \frac{0.693}{K}$ $k = \frac{0.693}{20} \text{ min}^{-1}$ $t = \frac{2.303}{k} \log \frac{[R]_0}{[R]}$ $= \frac{2.303}{0.693} \times 20 \log \frac{100}{25}$ $= \frac{2.303}{0.693} \times 20 \times 0.6$ $= 39.8 \text{ min.} \approx 40 \text{ min}$	1      1								
25	(a).(i) Because crystal field splitting energy is low and not sufficient for pairing of electrons. (ii) Because of chelate effect. (iii) The relative positions of the unidentate ligands attached to the central metal atom are the same with respect to each other.	1 1 1								
	OR									
	(b)(i) (I) $dsp^2$ , Diamagnetic (II) $sp^3d^2$ , Paramagnetic (ii) Linkage isomerism	$\frac{1}{2} + \frac{1}{2}$ $\frac{1}{2} + \frac{1}{2}$ 1								
26.	<table><tr><th><math>S_N1</math></th><th><math>S_N2</math></th></tr><tr><td>1. Rate depends on one reactant.</td><td>1. Rate depends upon two reactants.</td></tr><tr><td>2. Retention of configuration.</td><td>2. Inversion of configuration.</td></tr><tr><td>3. Racemisation occurs.</td><td>3. No Racemisation.</td></tr></table> <p>(Any two) (or any other two)</p> <p>2, 4, 6 – Trinitrochlorobenzene</p>	$S_N1$	$S_N2$	1. Rate depends on one reactant.	1. Rate depends upon two reactants.	2. Retention of configuration.	2. Inversion of configuration.	3. Racemisation occurs.	3. No Racemisation.	1+1  1
$S_N1$	$S_N2$									
1. Rate depends on one reactant.	1. Rate depends upon two reactants.									
2. Retention of configuration.	2. Inversion of configuration.									
3. Racemisation occurs.	3. No Racemisation.									
27.	(a) Carbylamine reaction / Primary amine when reacted with chloroform and alcoholic KOH forms foul smelling isocyanide. $\text{Ar/R-NH}_2 + \text{CHCl}_3 + 3\text{KOH} \xrightarrow[\text{alc}]{\Delta} \text{Ar/R-NC} + 3\text{KCl} + 3\text{H}_2\text{O}$ <p style="text-align: center;">1° amine</p>	1								

	<p>(b) When amide is heated with Br<sub>2</sub> and ethanolic or aq. NaOH, amine is formed with one carbon less /</p> <p></p> <p>(c) When aniline is treated with NaNO<sub>2</sub> + HCl at 0° - 5°C, then it gives benzene diazonium chloride /</p> <p></p>	<p>1</p> <p>1</p>						
28.	<p>(a) </p> <p>(b) </p> <p>(c)  </p>	1x3						
	SECTION - D							
29.	<p>(a) (i) (I) Salicylaldehyde (or 2 - hydroxy benzaldehyde) (II) Salicylic acid (or 2 – hydroxy benzoic acid) (ii) Acetylation</p> <p>(b) (i)Because of activation effect of – OH group. <b>OR</b> (ii)Because of resonance effect in Phenol which is not there in alcohol.</p> <p>(c) Ethanol &lt; propan-1-ol &lt; butan – 2-ol &lt; butan – 1-ol.</p>	<p>½</p> <p>½</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>						
30.	<p>(a)</p> <table><tr><th>Amylose</th><th>Amylopectin</th></tr><tr><td>1. Linear polymer of α-Glucose.</td><td>1. Branched polymer of α- Glucose.</td></tr><tr><td>2. Soluble in water.</td><td>2. Insoluble in water.</td></tr></table>	Amylose	Amylopectin	1. Linear polymer of α-Glucose.	1. Branched polymer of α- Glucose.	2. Soluble in water.	2. Insoluble in water.	1+1
Amylose	Amylopectin							
1. Linear polymer of α-Glucose.	1. Branched polymer of α- Glucose.							
2. Soluble in water.	2. Insoluble in water.							

	<p>(or any other two)</p> <p>(b) (i) Monosaccharides : Fructose, Glucose. (ii) Disaccharides : Lactose, Maltose.</p> <p style="text-align: center;"><b>OR</b></p> <p>Saccharide which on hydrolysis give large number of monosaccharides. Ex. Starch/cellulose/Glycogen. (Any one)</p> <p>(c) Glycosidic linkage.</p>	<p>½</p> <p>½</p> <p>½</p> <p>½</p> <p><b>1</b></p>
	<b>SECTION-E</b>	
<b>31.</b>	<p>(a)(i) Because C – H bond of propanal is weaker than C – C bond of propanone and hence cleaves easily during oxidation.</p> <p>(ii) Because – NH<sub>2</sub> with CO group is involved in resonance and acquire the charge due to which it does not undergo nucleophilic reaction.</p> <p>(iii) Because of the absence of α- hydrogen atom.</p> <p>(iv) Due to extensive association of carboxylic acid molecules through H-bond./ Due to strong hydrogen bonding, dimers are formed.</p> <p>(v) Because carbonyl carbon of aldehydes is more electrophilic than ketones.</p> <p style="text-align: right;">(or any other)</p>	<b>1x5</b>
	<b>OR</b>	
<b>31</b>	<p>(b)(i) (I) Benzaldehyde is formed. (II) Propan – 2 - ol is formed. (III) Benzyl alcohol and Benzoate.</p> <p>(ii) (I) On heating with NaOH &amp; I<sub>2</sub>, propanone form precipitate of CHI<sub>3</sub>, whereas propanal does not. (II) On adding NaHCO<sub>3</sub>, benzoic acid gives brisk effervescence of CO<sub>2</sub> whereas phenol does not./ Add neutral ferric chloride to both the compounds , phenol gives violet colour.</p>	<p><b>1</b></p> <p><b>1</b></p> <p>½+½</p> <p><b>1+1</b></p>
<b>32.</b>	<p>(a)(i) <math>E_{\text{cell}} = E_{\text{cell}}^0 - \frac{0.059}{n} \log \frac{[\text{Mg}^{2+}]}{[\text{Cu}^{2+}]}</math></p> <p style="text-align: center;"><math>= [0.34 + 2.36] - \frac{0.059}{2} \log \frac{[0.001]}{[0.0001]}</math></p>	<p><b>1</b></p> <p><b>1</b></p>

	$= 2.70 - \frac{0.059}{2} \log 10$ $= [2.70 - 0.0295] \text{ V}$ $= 2.6705 \text{ V}$ <p>(ii) Fuel cell is a galvanic cell which is used to convert energy of combustion of fuel into electrical energy.</p> <p>High efficiency &amp; pollution free.</p>	<p>1</p> <p>1</p> <p><math>\frac{1}{2} + \frac{1}{2}</math></p>
	<b>OR</b>	
32.	<p>(b)(i) <math>\Delta G^0 = -nFE_{\text{cell}}^0</math></p> $= -2 \times 96500 \text{ C mol}^{-1} \times 0.24 \text{ V}$ $= -46320 \text{ J mol}^{-1}$ $\log K_c = \frac{n E_{\text{cell}}^0}{0.059}$ $= \frac{2 \times 0.24}{0.059}$ $\log K_c = 8.14$ <p>(ii) (I) The amount of substance deposited or liberated is directly proportional to the amount of electricity passed through it.</p> <p>(II) Limiting molar conductivity is equal to sum of the individual contributions of anion and cation.</p>	<p><math>\frac{1}{2}</math></p> <p>1</p> <p><math>\frac{1}{2}</math></p> <p>1</p> <p>1</p> <p>1</p>
33.	<p>(a)(i) Transition elements are the elements which have incomplete d-orbital in ground state or in its common oxidation state.</p> <p>Show variable oxidation states / form complex / show catalytic activities / Paramagnetism. (any two)</p> <p>(ii) <math>\text{MnO}_2</math> fused with KOH in presence of air to form potassium manganate which on oxidation / acidification gives potassium permanganate.</p>	<p>1</p> <p>1+1</p> <p>1</p> <p>1</p>
	<b>OR</b>	
33.	<p>(b)(i) The steady decrease in atomic radii of lanthanides with increase in atomic number.</p> <p>4d &amp; 5d series elements have almost similar atomic radii.</p> <p>Difficult to separate the mixture of lanthanoids.</p> <p>(ii) (I) Due to low <math>\Delta_{\text{hyd}}H^0</math> and high <math>\Delta_a H^0</math>.</p> <p>(II) Due to comparable energies of 5f, 6d and 7s orbitals.</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>
	- o o o -	