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ANSWER KEY

II YEAR HIGHER SECONDARY EXAMINATION March 2025

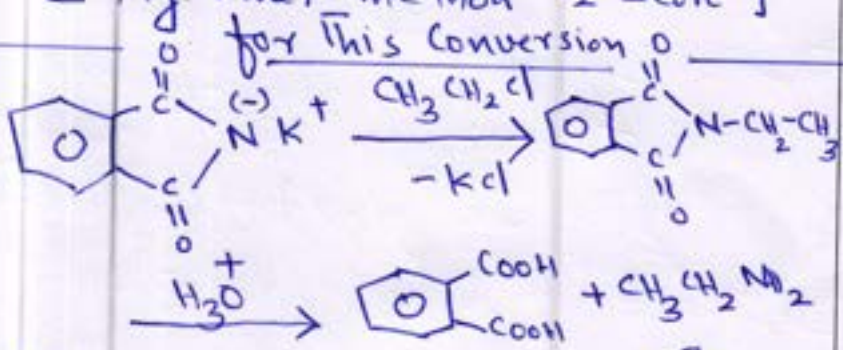
PART-I/II/III

SUBJECT: CHEMISTRY

CODE NO: SY 425 VERSION:.....

60 SCORES 2 HOURS

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
1.		(C) or (a)	1	1
2		Zero	1	1
3		Copper	1	1
4		Propan-1-ol or Praponol or Propyl alcohol or formula	1	1
5		$H_3\overset{\oplus}{N} - CH_2 - COO^{(-)}$	1	1
6		Correct equation Correct Substitution / Answer	1 1	2
7.		Correct representation	2	2
8		Integrated rate law Correct Substitution for 't' and [R] $t_{1/2} = \frac{0.693}{K}$	½ 1 ½	2
9		Correct definitions	1×2	2

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
10		A)- Benzylic halide B) Allylic halide C) Aryl halide D) Vinylic halide	½×4	2
11		(i) Propan-2-ol (ii) Ethanol	1 1	2
12	(i)	Correct Chemical equation Correct reason (one no.)	1 1	2
13	(i) & (ii)	Correct chemical equations	1×2	2
14		Equation/Explanation for Addition of RMgx Equation/Explanation for hydrolysis to form ketone [Any other method - 2 Score]	1 1	2
15		for this Conversion  [OR Explanation (2 Score)]	1 1	2
16	(i)	Correct Explanation based on inter molecular interactions	1	3
	(ii)	Correct graphs for +ve and -ve deviations	1×2	

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Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
17		Balanced equation for electrode Process	½	
		Nernst equation	1	
		Correct- Substitution	1	3
		Correct Value of the Potential	½	
18	(i)	$r = k[NO]^2[O_2]$	1	
	(ii)	Order = 3 ; Molecularity = 3	½ × 2	3
	(iii)	Rate increases to nine times the initial rate	1	
19		Correct reasons for (i), (ii) & (iii)	1 × 3	3
20		Description of Lanthanoid Contraction	1	
		Cause	1	3
		Two Consequences	½ × 2	
21	(i)	Primary Valence : 2, Sec. Valence : 4	½ × 2	
	(ii)	Diamminedichloridoplatinum (II)	1	3
	(iii)	Correct structures of cis and Trans Isomers	½ × 2	
22		Three Limitations	1 × 3	3
23	(i)	A: CH_3-CH_2-OH (½), B: NaI (½), C: $CH_2=CH_2$ (½)	1	
	(ii)	Finkelstein reaction	1	3
	(iii)	CH_3-CH_2-OH	1	
24	(i)	Two reasons	1 × 2	
	(ii)	Correct- equation for the Process	1	3

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Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
25	(i)	Correct reason	1	
	(ii)	Equation / Explanation - Protection of Amino group	1	3
		- Bromination	½	
		- Hydrolysis	½	
26		Correct- description of three types	½ x 3	
		Correct- examples for the three types	½ x 3	3
27	(i)	Correct- definition	1	
	(ii)	Calculation of no. of moles of K_2SO_4	½	
		Correct- equation for Osmotic Pressure	½	4
		$i = 3$	½	
		Correct Substitution	1	
		Correct value of the Osmotic pressure	½	
28	(i)	Correct reason	1	
	(ii)	Correct- Explanation / graphs for strong and weak electrolytes	1x2	4
	(iii)	Correct- Statement of the Law	1	
29.	(i)	Octahedral	½	
	(ii)	$[Ti(H_2O)_6]^{3+}$ / Diagram	½	4
	(iii)	Correct- diagrams	2	
	(iv)	Correct- Explanation	1	

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Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
30	(i)	Correct- reactions for the Preparation	1X2	
	(ii)	B or $CH_3-\underset{Br}{CH}-CH_3$	1	4
		Correct- justification	1	
31	(i)	Description of Aldol Condensation	½	
		Example of Aldol Condensation	1½	
	(ii)	Description of HVZ reaction	½	4
		Example of HVZ reaction	1½	

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