

ANSWER KEY

Second YEAR HIGHER SECONDARY EXAMINATION SAY 2022

PART-I/II/III

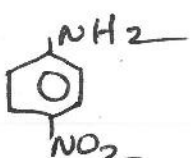
SUBJECT: CHEMISTRY

CODE NO: 725

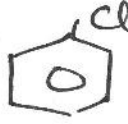
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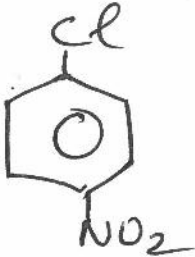
60 SCORES

2 HOURS

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
1.		(ii) / Co	1	1
2.		Isotonic solutions	1	1
3.		Statement / mathematical statement	1	1
4.		ZSM-5 or (iii)	1	1
5.		Zr or (iv)	1	1
6.			1	1
7.		Sulphur / S	1	1
8.		Salicylaldehyde / structure / IUPAC name	1	1
9.		Glycogen / animal starch	1	1
10.		Finkelstein Reaction or (iii)	1	1
11.		$\text{mol L}^{-1} \text{s}^{-1}$	1	1
12.		96500 C or (ii)	1	1
13.		Penicillin-G / (ii)	1	1

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
14.	(i)	Bcc : Correct Calculation / 2 atoms	1	2
	(ii)	Fcc : Correct Calculation / 4 atoms	1	
15.	(i)	Statement / Equation	1	2
	(ii)	Correct graph	1	
16.	(i)	Benzene Sulphonyl chloride	1	2
	(ii)	Distinguish 1° , 2° & 3° amines	1	
17		Lanthanoid contraction / ^{correct} explanation	2	2
18.		Correct preparation from MnO_2 / Correct equations	2	2
19.		$(C_2H_5)_2NH > C_2H_5NH_2 > NH_3 > CH_3NH_2$	2	2
20.	(i)	Defenition	1	2
	(ii)	$t_{1/2} = \frac{0.693}{k}$	1	

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
		<u>Part III</u>		
21.	(i)	 / chlorobenzene	1	4
	(ii)	Explanation / Equation	2	3
22	(i)	A - $\text{CH}_3\text{CH}_2\text{CH}_2\text{OH}$ B - $\text{CH}_3\text{CH}_2\text{CHO}$	1 1	3
	(ii)	Any suitable Test	1	
23	(i)	Correct Equation Explanation of any two terms	1 1	
	(ii)	It gives temperature dependence of rate of a reaction / Calculation of activation Energy / Calculation of frequency factor, 'A'	1	3
24		Correct Explanation / Diagram Example	2 1	3

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
25	(i)	Defenition Equation	1	3
	(ii)	Correct Calculation of molarity (Calculation of no. of moles - 1 score)	2	
26	(i)	Correct conversion	1	3
	(ii)		1	
		Correct justification	1	
27	(i)	Methanol / CH ₃ OH	1	3
	(ii)	Destructive distillation wood/ Commercial ^{preparation} preparation from water gas/ Equation	2	
28	(i)	<u>Part IV</u> $\Delta G^\circ = -nFE^\circ_{\text{cell}}$ $\Delta G^\circ = -2 \times 1.14 \times 96500 \text{ J}$ $= -212.27 \text{ kJ/mol}$	1 1	4
	(ii)	Correct reactions at Anode & Cathode Over all reaction	1 1	

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
		(Correct labelled diagram - 1/2)		
29.	(i)	Correct explanation	2	4
	(ii)	Any Two differences	2	
30.	(i)	A mixture of Al_2O_3 and Na_3AlF_6 / CaF_2 is electrolysed / Equations at cathode and Anode [Cathode - steel tank lined with C - 1/2 Score Anode - Graphite - 1/2 Score]	2	4
	(ii)	Explanation of Mond's process / Correct equations	2	
31.	(i)	Correct description of glycoside linkage	2	4
	(ii)	Correct preparation / Equation Correct reason	1 1	

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
32	(i)	Correct explanation	1	4
	(ii)	Equation	1	
	(iii)	Preparation	1	
		use	1	
33	(i)	Butylated Hydroxy Toluene/ Anti oxidant	2	4
	(ii)	Ortho Sulpho Benzimide / Structure	1	
		use	1	
<u>Part IV</u>				
34	(i)	Rosenmund's Reduction	1	6
		Pd/BaSO ₄	1	
	(ii)	Any Two differences	2	
	(iii)	Mono Fluoro Acetic Acid	1	
Correct justification		1		

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
35	(i)	Defenition Reason	1 1	6
	(ii)	Correet Reason	2	
	(iii)	Explanation / Equation with- Conditions (Conversion of SO_3 to deum - 1 score)	2	
36	(i)	Name and example of each isomerism	1x4=4	6
	(ii)	Diammine dichloridoplatinum(II) OR Tetracarbonyl nickel (0)	2	

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
	1.	Bindu. C HSST Chemistry, DBHSS Thiruvalla 9446430086. <i>Bindu</i>		
	2.	Indu. V. Gopalan - 9447045842	<i>Indu</i>	
	3.	Priya. K. B - 9020011138	<i>Priya</i>	
	4.	SANIL. R 9446064233	<i>Sanil</i>	
	5.	Shubh. K. R. 9447221515	<i>Shubh</i>	
	6.	Ratheesh, B 9497779551	<i>Ratheesh</i>	
	7.	Anand. N. S 9447591178	<i>Anand</i>	
	8.	Manoj. A 9447248689	<i>Manoj</i>	
	9.	ANIL. D 9447585458	<i>Anil</i>	