

SECOND YEAR HIGHER SECONDARY EXAMINATION MARCH 2020
 SUBJECT: CHEMISTRY Qn. Code: SY 25

Qn. No.	Sub Qns	Value Points	Score	Total
Answer any seven questions from 1 to 9. Each carries 1 score. (Total Score = 7)				
1		(c) Face centred cubic	1	1
2		(b) Kohlrausch law	1	1
3		(a) Silver sol	1	1
4		(b) Phosphine	1	1
5		(a) HCOOH	1	1
6		Phosgene or Carbonyl chloride or COCl_2	1	1
7		Sandmeyer's reaction	1	1
8		Isoprene or 2-Methyl-1,3-butadiene or structure	1	1
9		Phenol / $\text{C}_6\text{H}_5\text{-OH}$	1	1
Answer any ten questions from 10 to 22. Each carries 2 scores. (Total Score = 20)				
10	a b	p-type semiconductor n-type semiconductor	1 1	2
11		Schottky Defect: Two differences (or) One Difference with an example Frenkel: Two differences (or) One Difference with an example	1 1	2
12		NaCl - 2 Al(NO ₃) ₃ - 4 K ₂ SO ₄ - 3 Al ₂ (SO ₄) ₃ - 5	1 1 1 1	2
13		Overall Order = 2 OR $[\frac{3}{2} + \frac{1}{2}]$ Molecularity = 2 OR Definition of molecularity	2 1	2
14	a b	Leaching Froth floatation process	1 1	2
15		Correct Principle Name of Metals to be purified by Zone refining	2 1	2
16		Reaction of Chlorine with slaked lime (OR) $2\text{Ca(OH)}_2 + 2\text{Cl}_2 \rightarrow \text{Ca(OCl)}_2 + \text{CaCl}_2 + 2\text{H}_2\text{O}$	2	2
17	a b	Due to lanthanide contraction. no. of unpaired electrons = 1 Spin only magnetic moment, $\mu_s = \sqrt{n(n+2)}$ $= \sqrt{1(1+2)} = 1.73 \text{ BM}$	1 1 1 1	2
18		Primary valence = 0 Secondary valence = 4	2 2	2
19		Any One Reason (or) Resonating Structures of Haloarenes	2 1	2

20		Hydrogen bonding	2	2
21		Tollen's test / <i>Fehling's test</i> : / <i>Schiff's test</i> : / Iodoform (Haloform) / Benedicts Test / Equation	2	2
22		Definition for Analgesics / Example Definition for Antibiotics / Example	1 1	2
Answer any 7 questions from 23-31. Each carries 3 scores. (Total Score : 7 x 3 = 21)				
23	a b	No Graph with Correct Labelling About positive deviation	1 2 1	3
24	a b	Arrhenius Equation - $k = A.e^{-E_a/RT}$ Equation for calculation Substitution	2 1 1	3
25	a b	Electrophoresis Hardy – Schulze rule. (Name or Statement)	1 2	3
26		Statement OR Equation – Each step 1 mark (Balancing may not be compulsory)	3	3
27	a b	Diamminedichloridoplatinum(II) Structure of Cis (OR) Trans isomer	1 2	3
28	a b	2-pentene Or Pent-2-ene (or) (CH ₃ -CH ₂ -CH=CH-CH ₃) Zaitsev (Saytzeff) rule. (Name of the rule is enough)	1 2	3
29	1 2 3	CH ₃ CH ₂ NC (Ethyl isocyanide or Ethyl carbyl amine) Hoffmann bromamide degradation reaction. C ₆ H ₅ NH ₂ (Aniline)	2 2 2	3
30	a	Definition Addition polymers – One Example Condensation Polymers – One Example	2 1 1	3
31	a b	Any two difference Vitamin A	2 2	3
Answer any three questions from 32 to 35. Each carries 4 scores. (TOTAL SCORE – 3x4 = 12)				
32	a b c	Anode: Zn ; Cathode : Cu (Either anode or Cathode) Formula Substitution ANY Correct form of Nernst Equation for Daniel Cell	1 1 2 2	4
33		ANY TWO CORRECT ANSWERS (2x2)	4	4
34	a b	Lucas Reagent / Lucas Test Explanation for Lucas Test CH ₂ = CH ₂ , Ethene (Ethylene) / ALKENE /Dehydration	2 3 2	4
35	a b	Equation / Correct Statement Equation / Correct Statement	2 2	4