

DATE:31/7/2023	MONTHLY TEST-2(2023-24)	MAX MARKS:20
GRADE:XII	CHEMISTRY(043)	TIME:50 MIN

General Instructions:

There are 11 questions. All questions are compulsory.

Q.No	SECTION A (5x1 = 5 marks)	Marks
1.	Write the IUPAC name of the compound: $\begin{array}{c} CH_3 \\ \hline C\\ \hline CH_3 \\ \hline C\\ \hline C\\ \hline CH_3 \\ \hline C\\ \hline C\\ \hline CH_3 \\ \hline $	1
2.	Find the sum of the oxidation number and coordination number of cobalt in the complex:[Co(NH ₃) ₆]Cl ₃ a)3 b)6 c)9 d)12	1
3.	PCC $CH_3-CH=CH-CH_2-CH_2OH\rightarrow A .Identify \ A.$ $a) \ CH_3-CH=CH-CH_2-CHO \qquad b) CH_3-CH_2-CH_2-CH_2-CH_2$ $c) CH_3-CH=CH-CH_2-COOH \qquad d) CH_3-CH_2-CH_2-CH_2-CH_2OH$	1
4.	which is more acidic? a)2-nitro phenol b)4- nitro phenol c) 2-methy phenol d)phenol	1
5.	Find the product when methanal reacts with ethyl magnesium bromide. a) Ethanol b) propanol c) butana-1-ol d) butan-2-ol	1

	SECTION B (3x2 =6 marks)	
	Draw the cis and trans isomers of [Pt(en) ₂ Cl ₂] ²⁺	2
6.		
	How is ortho nitro phenol and para nitro phenol	2
7.	separated?Give reason.	
	Write with equation Riemer Tiemann reaction	2
8.		
	SECTION C (3x3 = 9 marks)	
9.	Prove using valence bond theory that [Ni(CN) ₄] ² - is square	3
	planar in shape while [Ni(CO) ₄] is tetrahedral in shape.	
10.	Write the mechanism of dehydartion of alcohol with	3
	con.H2SO4 producing alkene.	
	a) Write the equation of the reaction of anisole with HI.	1+2
11.		
	b)Using crystal field theory draw the filled diagram of an	
	octahedral complex having configuration d ⁴ if Δo >P	

PREPARED BY: KOCHURANY THOMAS