	12th Science : Chemistry Halogen Derivatives,	DATE:		
Quality Chashars		TIME: 1 hour		
		MARKS: 25		
Only way to fulfill your dreams	SEAT NO:			
Note:-				
1. All Questions are compulsory.				
2. Numbers on the right indicate full marks.				

Section A

Q.1 Select and write the correct answer.

 The organic chloro compound which shows complete stereochemical inversion during a SN₂ reaction is

A) CH_3CI B) $(C_2H_5)_2CHCI$ C) $(CH_3)_3CCI$ D) $(CH_3)_2CHCI$

2. Which one of the following gives only one monochloro derivative?

A) n - HexaneB) 2 - Methyl pentaneC) 2, 3 - dimethyl pentaneD) neo-pentane

3. Among the following, the most reactive to wards alc. KOH is

A) $CH_2 = CH Br$ B) $CH_3COCH_2CH_2Br$ C) CH_3CN_2Br D) $CH_3CH_2CH_2Br$

4. The optically inactive compound is

A) GlucoseB) Lactic alidC) 2 - chlorobutaneD) 2 - chloropropane

Q.2 Answer the following.

- 1. Haloarenes are insoluble in water but are soluble in benzene. Explain.
- 2. What is an electrophile?
- 3. What type of reactions are observed in benzene?

Section B Attempt any Four

- Q.3 Explain how nature of nucleophile affects the reactivity of S_N^{1} and S_N^{2} ?
- Q.4 How will you obtain 1–Bromo–1– methylcyclohexane from alkene? Write possible structures of (2) alkene and the reaction involved.
- Q.5 Out of $HCl_{(g)}$ and $SOCl_2$, which is preferred for converting ethanol into chloro ethane? (2)
- Q.6 How do alkyl halides react with silver salts of fatty acids?
- Q.7 Give reason: Reactions involving Grignard reagent must be carried out under anhydrous (2) condition.

(3)

(2)

(2)

(4)

Q.8 Give classification of halogen derivatives of hydrocarbons on the basis of hydrocarbon (2) skeleton.

Section C Attempt any Two

Q.9	Rewrite the following reactions by filling the blanks :	(3)		
	1. $CH_3 - CH = CH_2 + HBr \longrightarrow \frac{+}{(Major)(80\%)}$			
	2. $(CH_3)_2C = CH CH_3 + HBr \xrightarrow{\text{Peroxide}} (major) + (minor)$			
	3. $CH_3 - CH = CH_2 + HBr \xrightarrow{\text{Peroxide}} (major) + (minor)$			
Q.10	Give the following conversions. (a) p–nitro chloro benzene to p–nitro phenol (b) 2, 4 – dinitrochloro benzene to 2, dinitrophenol (c) 2, 4, 6 – trinitrochloro benzene to 2, 4, 6 – trinitrophenol			
Q.11	What is Wurtz reaction? Explain with suitable example.	(3)		
Section D Attempt any One				
Q.12	Give physical property and environmental effects of (a) Dichloromethane (b) Chloroform (c) Carbon tetrachloride (d) lodoform (e) Freons (f) Dichloro diphenyl trichloro ethane	(4)		
Q.13	Write IUPAC names of the following compounds.	(4)		
	CH ₃ CH ₃			
	¹ . $CH_3 - CH - CH_2 - CH_3$ ² . $CH_3 - C - CH_2 - CH_2 - CH_3$			
	Br Br CH ₂ -CH ₃			
	3. CH ₃ – CH ₂ – CH ₂ – CH ₂ – Cl 4. p-dichlorobenzene			