

CHEMISTRY-12	Chapter # 10 (Complete) Test: B-3		
	Name:	Class:	ID:
Date: / /	Marks	30	Marks Obtained:
Time Allowed: 60 Min.	Total:		

Maximum Marks: 06

(OBJECTIVE TYPE)

Time Allowed: 10 Min.

NOTE: Tick The Correct Option:

- In primary alkyl halides, the halogen atom is attached to a carbon which is further attached to how many carbon atoms?
 (a) Two (b) Three (c) Four (d) One
- When CO_2 is made to react with ethyl magnesium iodide, followed by acid hydrolysis, the product formed is:
 (a) Propane (b) Propanoic acid (c) Propanal (d) Propanol
- Which one of the followings is the best nucleophile?
 (a) H_2O (b) NH_3 (c) $\text{C}_2\text{H}_5\text{O}^-$ (d) NO
- What is the IUPAC name of $(\text{CH}_3)_2\text{CH}-\text{CH}_2-\text{CH}(\text{C}_2\text{H}_5)-\text{CH}_2-\text{Cl}$?
 (a) 1-Chloro-4-methylheptane (b) 1-Chloro-2-ethyl-4,4-dimethylbutane
 (c) 1-Chloro-2-ethyl-4-methylpentane (d) 1-Chloro-2-isobutylbutane
- In $\text{S}_{\text{N}}1$ reactions, the product shows _____ of configuration.
 (a) 50% inversion (b) 50% retention (c) 100% inversion (d) Both 'a' & 'b'
- The order of reactivity of alkyl halides with Mg is in the order:
 (a) $\text{C}_3\text{H}_7\text{X} > \text{C}_2\text{H}_5\text{X} > \text{CH}_3\text{X}$ (b) $\text{CH}_3\text{X} > \text{C}_2\text{H}_5\text{X} > \text{C}_3\text{H}_7\text{X}$
 (c) $\text{C}_3\text{H}_7\text{X} > \text{CH}_3\text{X} > \text{C}_2\text{H}_5\text{X}$ (d) $\text{CH}_3\text{X} > \text{C}_3\text{H}_7\text{X} > \text{C}_2\text{H}_5\text{X}$

Maximum Marks: 24

(SUBJECTIVE TYPE)

Time Allowed: 50 Min.

SECTION-I

Q.2: Give brief answers to the following questions:

(16)

- Write IUPAC names of: a) $(\text{CH}_3)_3\text{C}-\text{CH}_2-\text{Cl}$ b) $(\text{CH}_3)_2\text{CHBr}$
- Give one method for the preparation of alkyl iodides.
- Discuss the effect of bond energy on the reactivity of alkyl halides.
- Give mechanism of $\text{S}_{\text{N}}2$ reactions.
- Give reactions and conditions to convert ethyl bromide into:
 (a) Ethyl alcohol (b) Ethyl cyanide.
- What is Wurtz synthesis?
- Why Grignard reagents are so reactive?
- Write reaction of ethyl magnesium chloride with methanal.

SECTION-II

NOTE: Attempt All Questions:

(08)

Q.3: Define β -elimination reactions? Discuss in detail E_1 reactions with mechanism.

Q.4: Starting from $\text{CH}_3-\text{CH}_2-\text{Br}$, how will you prepare the following compounds?

- (i) n-Butane (ii) Ethane (iii) Ethene (iv) Propanoic acid