

Name: _____						
Subject: Chemistry		Class: 12 th	Time: 60 minutes	Total Marks:	30	
Chapter No.10		MJDEXPERT.COM			Obtained marks	

Note: Please attempt any 7 short questions from Question 2. Also, attempt both parts (a and b) of Question 3. Cutting and removal of any content is strictly prohibited.

Objective-Section

Q. 1 Encircle the correct answer. (8x1=8)

- Which of the followings is not a nucleophile?
(A) SO_3 (B) NH_3 (C) H_3O (D) CN
- Species deficient in electron are called:
(A) Electrophiles (B) Bases (C) Nucleophiles (D) Oxidizing agent
- 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 of the following is not a nucleophile?
(A) H_2S (B) H_2O (C) BF_3 (D) NH_3
- For which step mechanism, the first step involved is the same
(A) E_1 and E_2 (B) E_2 and SN_2 (C) SN_1 and E_2 (D) E_1 and SN_1
- Which of the following is not a nucleophile?
(a) H_2O (b) H_2S (c) BF_3 (d) NH_3
- Reactivity of Grignard's reagent is due to:
(A) Halogen atom (B) Mg Atom (C) Polarity of C-Mg atom (D) All of those
- Elimination bimolecular reactions involve:
(a) first order kinetics (b) second order kinetics
(c) third order kinetics (d) zero order kinetics

Subjective-Section

Q.2 Write short answers of any SEVEN (7) of the following questions: (7x2=14)

- Write down the best method for the preparation of alkyl halides.
- Define nucleophilic substitution reactions give its two types.
- Convert Ethyl bromide into (i) Ethane (b)n- Butane
- What is Grignard's reagent? Give two examples.
- Show the mechanism for the reaction of acetone with Grignard's reagent.
- What do you understand by the term E-elimination reactions?
- What is Wurtz synthesis?
- How TEL can be produced from alkyl halides?

Q.No.3 Long Question: (4+4=8)

- Define and explain. (i)Nucleophile (ii) Electrophile (iii) Leaving group (iv) Substrate
- What products are formed when the following compounds are treated with ethyl magnesium bromide, followed by hydrolysis in the presence of an acid?
(i) CO_2 (ii) CH_3CHO (iii) $(\text{CH}_3)_2\text{CO}$