

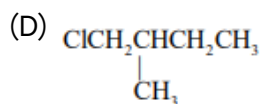
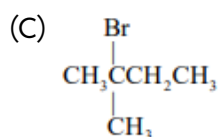
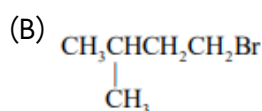
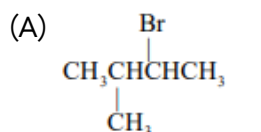
Lakshya NEET (2025)

Organic Chemistry

DPP: 7

Haloalkanes and Haloarenes

Q1 Which of the following alkyl halides gives the fastest S_N1 reaction?



Q2 Which of the following factors has no effect on the rate of S_N1 reactions?

- (A) the nature of the alkyl halide
 (B) the nature of the leaving group
 (C) the concentration of the alkyl halide
 (D) the concentration of the nucleophile

Q3 Which of the following is the rate law for S_N1 mechanisms?

- (A) Rate = $k[\text{Alkyl Halide}][\text{Nucleophile}]$
 (B) Rate = $k[\text{Nucleophile}]$
 (C) Rate = $k[\text{Alkyl Halide}]$
 (D) Rate = $k[\text{Alkyl Halide}][\text{Nucleophile}] + k_2[\text{Alkyl Halide}]$

Q4 Which statement is true with respect to an S_N2 reactions?

- (A) A good leaving group is a strong base

(B) A good leaving group is a weak base

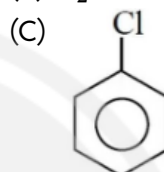
(C) A leaving group must be negatively charged

(D) A leaving group must be a halide

Q5 Most reactive toward S_N2 :

(A) $\text{CH}_3 - \text{Cl}$

(B) $\text{H}_2\text{C} = \text{CH} - \text{Cl}$



(D) $\text{CH}_3 - \text{F}$

Q6 Which of the following species is most reactive in an S_N2 reaction?

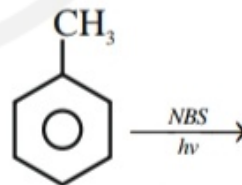
(A) $\text{CH}_3\text{CH}_2 - \text{Cl}$

(B) $\text{CH}_3\text{CH}_2 - \text{Br}$

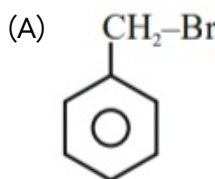
(C) $\text{CH}_3\text{CH}_2 - \text{I}$

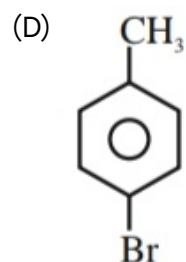
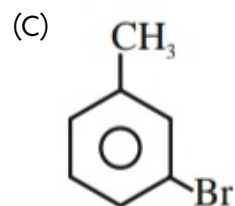
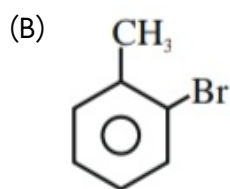
(D) $\text{CH}_3\text{CH}_2 - \text{F}$

Q7



P, product P is :-





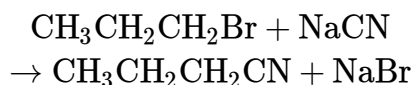
Q8 Which is the best leaving group in a substitution reaction of an alkyl halide?

- (A) Cl^-
 (B) Br^-
 (C) I^-
 (D) F^-

Q9 Ethyl bromide reacts with silver nitrite to form

- (A) Nitroethane
 (B) Nitroethane and ethyl nitrite
 (C) Ethyl nitrite
 (D) Ethane

Q10 Consider the reaction



This reaction will be the fastest in

- (A) Ethanol
 (B) Methanol
 (C) N,N-dimethylformamide(DMF)
 (D) Water

Q11 Which of the following $\text{S}_{\text{N}}2$ reactions is the slowest?

- (A) $\text{CH}_3\text{CH}_2\text{CH}_2\text{Br} + \text{HO}^- \rightarrow \text{CH}_3\text{CH}_2\text{CH}_2\text{OH} + \text{Br}^-$
 (B) $\text{CH}_3\text{CH}_2\text{CH}_2\text{Cl} + \text{HO}^- \rightarrow \text{CH}_3\text{CH}_2\text{CH}_2\text{OH} + \text{Cl}^-$
 (C) $\text{CH}_3\text{CH}_2\text{CH}_2\text{I} + \text{HO}^- \rightarrow \text{CH}_3\text{CH}_2\text{CH}_2\text{OH} + \text{I}^-$
 (D) $\text{CH}_3-\underset{\text{F}}{\text{C}}\text{HCH}_3 + \text{HO}^- \rightarrow \text{CH}_3-\underset{\text{OH}}{\text{C}}\text{HCH}_3 + \text{F}^-$

Q12 What would be the product when isopropyl chloride reacts with KCN ?

- (A) Propene
 (B) 2-Methyl propane nitrile
 (C) Propyne
 (D) Propane nitrile

Q13 $\text{S}_{\text{N}}1$ reaction on a chiral center would give

- (A) Retention only
 (B) Inversion only
 (C) Racemization
 (D) Inversion in more extent & retention in less extent

Q14 $\text{S}_{\text{N}}2$ reaction on a chiral center proceeds via

- (A) Complete Retention
 (B) Complete Inversion
 (C) Complete Racemization
 (D) Partial Racemization



Answer Key

Q1 (C)
Q2 (D)
Q3 (C)
Q4 (B)
Q5 (A)
Q6 (C)
Q7 (A)

Q8 (C)
Q9 (A)
Q10 (C)
Q11 (D)
Q12 (B)
Q13 (D)
Q14 (B)



[Android App](#)

| [iOS App](#)

| [PW Website](#)

