

PYQSide

JEE MAIN HALOALKANES AND HALOARENES — PREPARATION OF HALOALKANES — PYQS

Max. Marks: 20

Questions: 5

Section A (MCQ)

Q.1 Given below are two statements :

Statement-I: 3-phenylpropene reacts with HBr and gives secondary alkyl bromide having a chiral carbon atom as the major product.

Statement-II: Aryl chlorides and aryl cyanides can be prepared by Sandmeyer reaction as well as Gattermann reaction.

In the light of the above statements, choose the correct answer from the options given below :

[JEE Main 2026 (Online) 6th April Morning Shift]

- (1) Both Statement-I and Statement-II are true
 (2) Both Statement-I and Statement-II are false
 (3) Statement-I is true but Statement-II is false
 (4) Statement-I is false but Statement-II is true

Scan or tap for the full solution



Q.2 Match the LIST-I with LIST-II

Name of reaction		Reagent or catalyst used	
A.	Finkelstein reaction	I.	SbF ₃
B.	Swarts reaction	II.	Na, dry ether
C.	Sandmeyer's reaction	III.	NaI
D.	Fittig reaction	IV.	Cu ₂ Cl ₂

Choose the correct answer from the options given below : [JEE Main 2026 (Online) 4th April Morning Shift]

- (1) A-I, B-IV, C-III, D-II (2) A-III, B-I, C-IV, D-II
 (3) A-IV, B-II, C-I, D-III (4) A-I, B-III, C-II, D-IV

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Q.3 Correct statements regarding alkyl halides (R-X) among the following are :

- A. Alcohol being less polar solvent as compared to water, alcoholic KOH favours elimination reaction with R-X.
 B. Order of reactivity towards S_N1 mechanism is C₆H₅-CH₂-Cl > C₆H₅-CHCl-C₆H₅.
 C. Non substituted aryl halides exhibit properties similar to alkyl halides.
 D. Vinyl chloride is an example of haloalkene and allyl chloride is an example of haloalkyne.

E. R-Cl can be prepared by reacting R-OH with SOCl₂ but Ar-Cl cannot be prepared by reacting Ar-OH with SOCl₂.

Choose the **correct** answer from the options given below : [JEE Main 2026 (Online) 2nd April Evening Shift]

- (1) A, B and C Only (2) B and D Only
 (3) A and E Only (4) D and E Only

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Q.4 Match List-I with List-II.

List-I (Reaction)	
A.	$2 \text{C}_6\text{H}_5\text{X} + 2\text{Na} \xrightarrow[\text{Ether}]{\text{Dry}} \text{C}_6\text{H}_5\text{C}_6\text{H}_5 + 2\text{NaX}$
B.	$\text{ArN}_2^+ \text{X}^- \xrightarrow[\text{HCl}]{\text{Cu}} \text{ArCl} + \text{N}_2 \uparrow + \text{CuX}$
C.	$\text{C}_2\text{H}_5\text{Br} + \text{NaI} \xrightarrow[\text{Acetone}]{\text{Dry}} \text{C}_2\text{H}_5\text{I} + \text{NaBr}$
D.	$\text{CH}_3\text{C}(\text{OH})(\text{CH}_3)\text{CH}_3 \xrightarrow[\text{ZnCl}_2]{\text{HCl}} \text{CH}_3\text{C}(\text{Cl})(\text{CH}_3)\text{CH}_3$

List-II (Name of reaction)	
I.	Lucas reaction
II.	Finkelstein reaction
III.	Fittig reaction
IV.	Gatterman reaction

Choose the correct answer from the options given below: [JEE Main 2025 (Online) 2nd April Evening Shift]

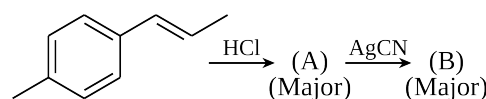
- (1) (A)-(III), (B)-(II), (C)-(IV), (D)-(I)
 (2) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)
 (3) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)
 (4) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)

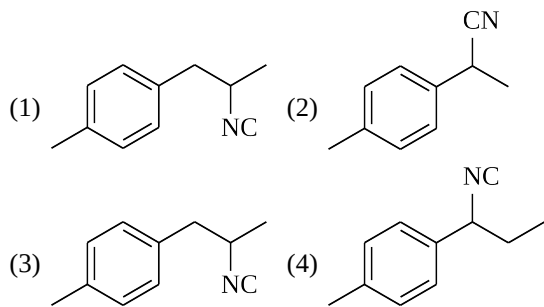
Scan or tap for the full solution



Q.5 The product B formed in the following reaction sequence is:

[JEE Main 2025 (Online) 28th January Evening Shift]





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full solution



ANSWER KEY

Ques.	1	2	3	4	5						
Ans.	3	2	3	4	4						