

PYQSide

JEE MAIN AMINES — CHEMICAL REACTIONS OF DIAZONIUM SALTS, COUPLING REACTIONS AND AZO COMPOUNDS — PYQS

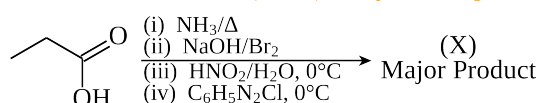
Max. Marks: 24

Questions: 6

Section A (MCQ)

- Q.1** Consider the following organic reaction sequence. Choose the final product (X) from the following (consider the major product in all intermediate reactions)

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

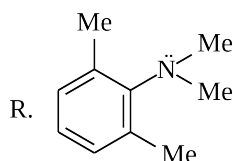


- (1) Benzene (2) Phenol
(3) Propanol (4) Chlorobenzene

Scan or tap for the full solution

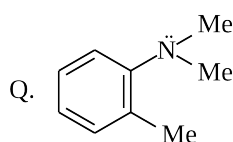
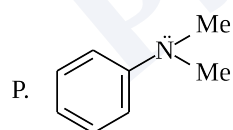


- Q.2** Consider the three aromatic molecules (P, Q and R) whose structures have been given below :



The correct order regarding the reactivity of these compounds with $\text{Ph-N}^+\equiv\text{NCl}^-$ under optimum but slightly acidic medium is :

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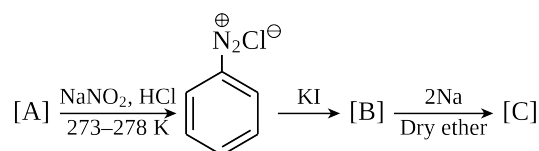
- (1) $P > Q > R$ (2) $R > P > Q$
(3) $R > Q > P$ (4) $P > R > Q$

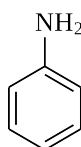
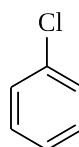
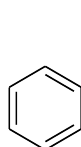
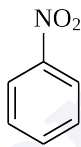
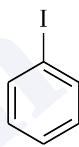
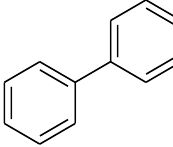
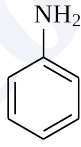
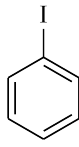
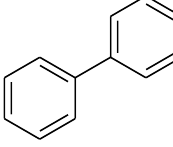
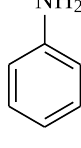
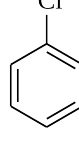
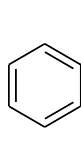
Scan or tap for the full solution



- Q.3** Identify [A], [B] and [C], respectively in the following reaction sequence :

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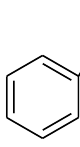
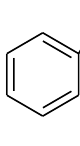
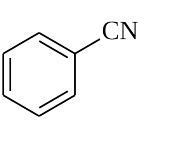
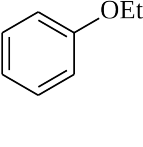
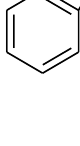
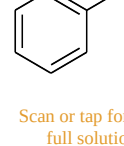


- (1) [A]  [B]  [C] 
(2) [A]  [B]  [C] 
(3) [A]  [B]  [C] 
(4) [A]  [B]  [C] 

Scan or tap for the full solution



- Q.4** In the following reactions, which one is NOT correct? [JEE Main 2025 (Online) 3rd April Morning Shift]

- (1)  $\xrightarrow[\text{H}_3\text{PO}_2 / \text{H}_2\text{O}]{\text{N}_2^+\text{Cl}^-}$ 
(2)  $\xrightarrow[\text{CuCN / KCN}]{\text{N}_2^+\text{Cl}^-}$ 
(3)  $\xrightarrow{\text{EtOH}} \text{N}_2^+\text{Cl}^-$ 
(4)  $\xrightarrow{\text{Potassium Iodide}} \text{N}_2^+\text{Cl}^-$ 

Scan or tap for the full solution



- Q.5** When a concentrated solution of sulphanilic acid and 1-naphthylamine is treated with nitrous acid (273 K) and acidified with acetic acid, the mass (g) of 0.1 mole of product formed is:
(Given molar mass in g mol^{-1} H : 1, C : 12, N : 14, O : 16, S : 32)

[JEE Main 2025 (Online) 2nd April Evening Shift]

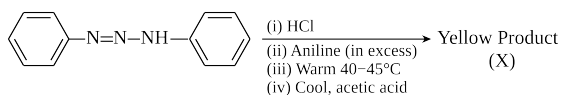
- (1) 330 (2) 33 (3) 343 (4) 66

Scan or tap for the
full solution



Section B (Numerical)

- Q.6** Consider the following sequence of reactions.



The percentage of nitrogen in the yellow product (X) formed is ____%. (Nearest Integer)
(Given Molar mass in g mol^{-1} H : 1, C : 12, N : 14)

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

Scan or tap for the
full solution



ANSWER KEY

Section A (MCQ)

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

Section B (Numerical)

Ques.	6										
Ans.	21										