

PART 1 - CHEMISTRY

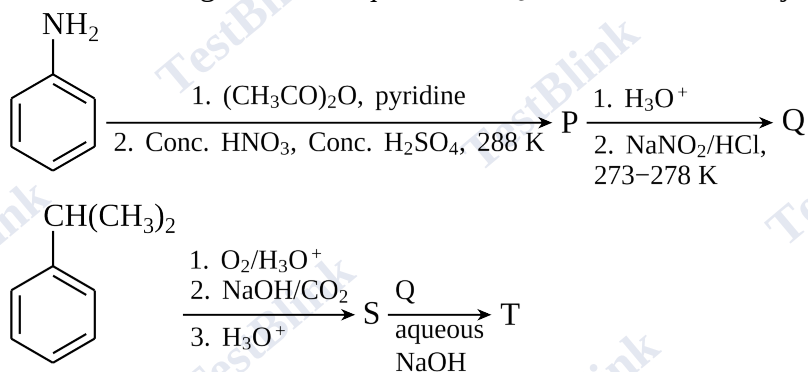
Topic : Amines

SECTION-A : (Maximum Marks : 12)

- This section contains **THREE** questions.
- Each question has **FOUR** options (A), (B), (C) and (D). **ONE OR MORE THAN ONE** of these four option(s) is(are) correct answer(s).
- For each question, choose the option(s) corresponding to (all) the correct answer(s).
- Answer to each question will be evaluated according to the following marking scheme :

Full Marks	: +4	ONLY if (all) the correct option(s) is(are) chosen;
Partial Marks	: +3	If all the four options are correct but ONLY three options are chosen;
Partial Marks	: +2	If three or more options are correct but ONLY two options are chosen, both of which are correct;
Partial Marks	: +1	If two or more options are correct but ONLY one option is chosen and it is a correct option;
Zero Marks	: 0	If none of the options is chosen (i.e. the question is unanswered);
Negative Marks	: -1	In all other cases.
- For example, in a question, if **(A), (B) and (D)** are the ONLY three options corresponding to correct answers, then choosing ONLY (A), (B) and (D) will get +4 marks; choosing ONLY (A) and (B) will get +2 marks; choosing ONLY (A) and (D) will get +2 marks; choosing ONLY (B) and (D) will get +2 marks; choosing ONLY (A) will get +1 mark; choosing ONLY (B) will get +1 mark; choosing ONLY (D) will get +1 mark; choosing no option (i.e. the question is unanswered) will get 0 marks; and choosing any other combination of options will get -1 marks.

1. In the following reaction sequence, P, Q, S and T are the major products.



The correct statement(s) about P, Q, S and T is(are)

[JEE Advanced 2026 Paper 2]

- (A) Q on treatment with ethanol generates an aromatic aldehyde.
 (B) S gives positive phthalein dye test.
 (C) P is a dinitro compound.
 (D) T is a coloured compound.

Scan or tap for the
full solution



2. The major products obtained from the reactions in **List-II** are the reactants for the named reactions mentioned in **List-I**. Match each entry in **List-I** with the appropriate entry in **List-II** and choose the correct option.

[JEE Advanced 2025 Paper 1]

Space for Rough Work

List-I		List-II	
P.	Stephen reaction	1.	Toluene $\xrightarrow{\text{(i) CrO}_2\text{Cl}_2/\text{CS}_2; \text{(ii) H}_3\text{O}^+}$
Q.	Sandmeyer reaction	2.	Benzoic acid $\xrightarrow{\text{(i) PCl}_5; \text{(ii) NH}_3; \text{(iii) P}_4\text{O}_{10}, \Delta}$
R.	Hoffmann bromamide degradation reaction	3.	Nitrobenzene $\xrightarrow{\text{(i) Fe, HCl; (ii) HCl, NaNO}_2 (273-278 \text{ K}), \text{H}_2\text{O}}$
S.	Cannizzaro reaction	4.	Toluene $\xrightarrow{\text{(i) Cl}_2/h\nu, \text{H}_2\text{O}; \text{(ii) Tollen's reagent; (iii) SO}_2\text{Cl}_2; \text{(iv) NH}_3}$
		5.	Aniline $\xrightarrow{\text{(i) (CH}_3\text{CO)}_2\text{O, Pyridine; (ii) HNO}_3, \text{H}_2\text{SO}_4, 288 \text{ K; (iii) aq. NaOH}}$

(A) P $\rightarrow$ 2; Q $\rightarrow$ 4; R $\rightarrow$ 1; S $\rightarrow$ 3

(B) P $\rightarrow$ 2; Q $\rightarrow$ 3; R $\rightarrow$ 4; S $\rightarrow$ 1

(C) P $\rightarrow$ 5; Q $\rightarrow$ 3; R $\rightarrow$ 4; S $\rightarrow$ 2

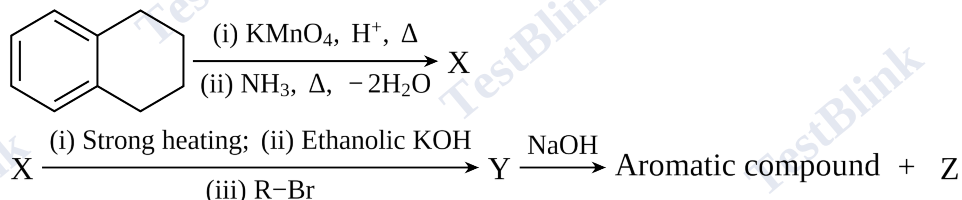
(D) P $\rightarrow$ 5; Q $\rightarrow$ 4; R $\rightarrow$ 2; S $\rightarrow$ 1

Scan or tap for the full solution



3. For the reaction sequence given below, the correct statement(s) is(are)

[JEE Advanced 2025 Paper 2]



(A) Both X and Y are oxygen containing compounds.

(B) Y on heating with CHCl_3/KOH forms isocyanide.

(C) Z reacts with Hinsberg's reagent.

(D) Z is an aromatic primary amine.

Scan or tap for the full solution



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JEE ADVANCED AMINES — PYQS

Test Pattern : **JEE (Advanced)**

ANSWER KEY

[illegible]