

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;

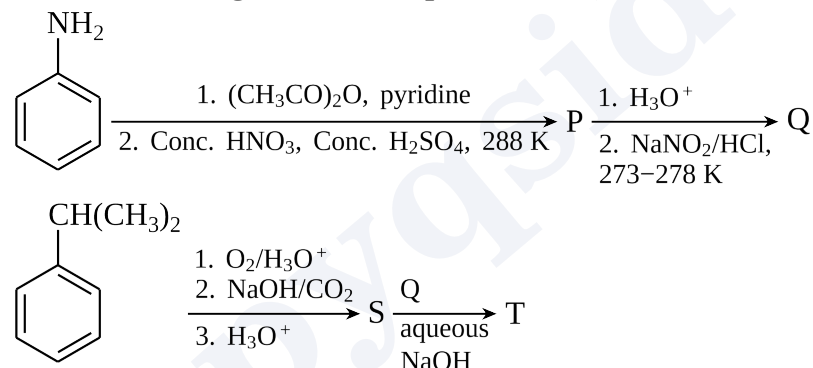
Partial Marks : +1 If two or more options are correct but ONLY one option is chosen and it is a correct option;

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



Space for Rough Work

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]

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

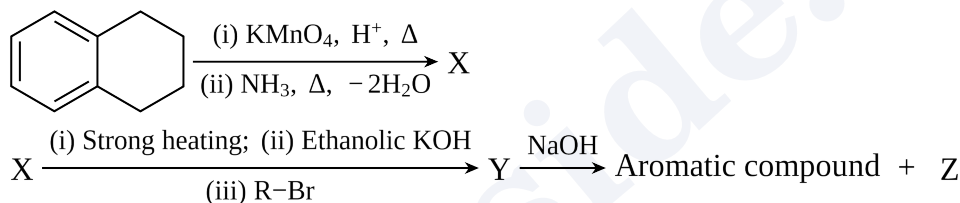
(D) P $\rightarrow$ 5; Q $\rightarrow$ 4; R $\rightarrow$ 2; S $\rightarrow$ 1

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



Space for Rough Work

JEE ADVANCED AMINES — PYQS

Test Pattern : JEE (Advanced)

ANSWER KEY**SECTION-A**

Ques.	1	2	3																				
Ans.	B, D	B	A, C																				