

PYQSide

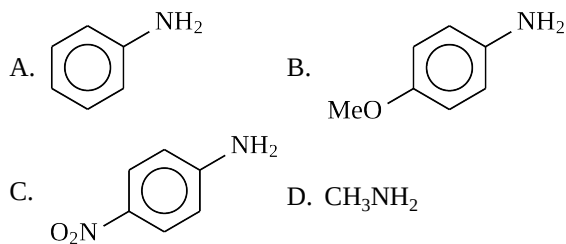
JEE MAIN AMINES — BASICITY OF AMINES — PYQS

Max. Marks: 12

Questions: 3

Section A (MCQ)

Q.1 The descending order of basicity of the following amines is :



E. $(\text{CH}_3)_2\text{NH}$

Choose the **correct** answer from the options given below : [JEE Main 2025 (Online) 7th April Evening Shift]

- (1) $\text{E} > \text{A} > \text{D} > \text{C} > \text{B}$ (2) $\text{E} > \text{D} > \text{A} > \text{B} > \text{C}$
 (3) $\text{E} > \text{D} > \text{B} > \text{A} > \text{C}$ (4) $\text{B} > \text{E} > \text{D} > \text{A} > \text{C}$

Scan or tap for the full solution 

Q.2 The correct order of basic nature in aqueous solution for the bases NH_3 , $\text{H}_2\text{N}-\text{NH}_2$, $\text{CH}_3\text{CH}_2\text{NH}_2$, $(\text{CH}_3\text{CH}_2)_2\text{NH}$ and $(\text{CH}_3\text{CH}_2)_3\text{N}$ is :

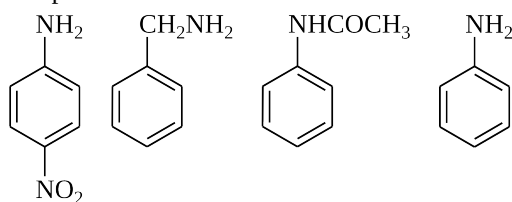
[JEE Main 2025 (Online) 2nd April Morning Shift]

- (1) $\text{NH}_3 < \text{H}_2\text{N}-\text{NH}_2 < (\text{CH}_3\text{CH}_2)_3\text{N} < \text{CH}_3\text{CH}_2\text{NH}_2 < (\text{CH}_3\text{CH}_2)_2\text{NH}$
 (2) $\text{H}_2\text{N}-\text{NH}_2 < \text{NH}_3 < (\text{CH}_3\text{CH}_2)_3\text{N} < \text{CH}_3\text{CH}_2\text{NH}_2 < (\text{CH}_3\text{CH}_2)_2\text{NH}$
 (3) $\text{H}_2\text{N}-\text{NH}_2 < \text{NH}_3 < \text{CH}_3\text{CH}_2\text{NH}_2 < (\text{CH}_3\text{CH}_2)_3\text{N} < (\text{CH}_3\text{CH}_2)_2\text{NH}$
 (4) $\text{NH}_3 < \text{H}_2\text{N}-\text{NH}_2 < \text{CH}_3\text{CH}_2\text{NH}_2 < (\text{CH}_3\text{CH}_2)_2\text{NH} < (\text{CH}_3\text{CH}_2)_3\text{N}$

Scan or tap for the full solution 

Section B (Numerical)

Q.3 Given below are some nitrogen containing compounds :



Each of them is treated with HCl separately. 1.0 g of the most basic compound will consume _____ mg of HCl.

(Given molar mass in g mol^{-1} C : 12, H : 1, O : 16, Cl : 35.5)

[JEE Main 2025 (Online) 29th January Morning Shift]

Scan or tap for the full solution 

ANSWER KEY

Section A (MCQ)

Ques.	1	2													
Ans.	3	3													

Section B (Numerical)

Ques.	3														
Ans.	341														