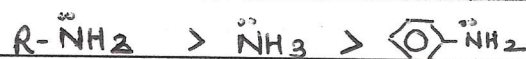


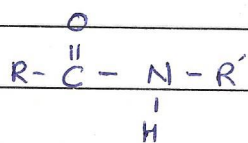
26 - Organic Nitrogen CompoundsQ-1) Compare basic character of NH_3 , R-NH_2 and phenylamine

Most basic

Least basic

- > The lone pair on the nitrogen can accept H^+ \therefore amines are basic.
- > R-NH_2 is most basic because of the electron donating R group which makes the Nitrogen most electronegative.
- > Phenylamine is least basic because the lone pair of electrons become part of the benzene ring \therefore reducing the charge density.

Q-2) Character of amides

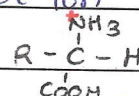


- > Amides are neutral.

Q-3) Acid-base character of amino acids

- > Amino acids act as buffer.

• When acid is added, the $-\text{COO}^-$ part of the zwitter ion accepts H^+ . This leaves a positively charged ion



• When alkali is added, the $-\text{NH}_3^+$ part of the zwitter ion donates a H^+ . This leaves a negative charged ion

