Q1. Which test can tell the difference between p-chloroaniline and anilinium hydrochloride?

- a) Sandmeyer reaction
- b) Carbylamine test
- c) AgNO₃
- d) NaHCO3

## Answer: d

**Explanation**: An acid salt, anilinium hydrochloride, liberates  $CO_2$  from NaHCO<sub>3</sub>. However, because p-chloro aniline is basic rather than acidic, it does not release  $CO_2$ . Because p-chloro aniline lacks ionic chlorine, it does not produce white ppt when combined with  $AgNO_3$ .