

Q1 Which of the following compound will not undergo azo coupling reaction with benzene diazonium chloride.

- (i) Aniline
- (ii) Phenol
- (iii) Anisole
- (iv) Nitrobenzene

**ANSWER: OPTION (IV) IS CORRECT**

Diazonium cation is a weak electrophile and hence reacts with electron rich compounds containing electron donating groups such as -OH, -NH<sub>2</sub> and -OCH<sub>3</sub> groups and not with compounds containing electron withdrawing groups such as -NO<sub>2</sub>, etc.