

Q4. Amongst the given set of reactants, the most appropriate for preparing 2° amine is _____.

(i) 2° R—Br + NH₃

(ii) 2° R—Br + NaCN followed by H₂/Pt

(iii) 1° R—NH₂ + RCHO followed by H₂/Pt

(iv) 1° R—Br (2 mol) + potassium phthalimide followed by H₃O⁺/heat

Ans. (iii) 1° R—NH₂ + RCHO followed by H₂/Pt

Q5. Hoffmann Bromamide Degradation reaction is shown by _____.

(i) ArNH₂

(ii) ArCONH₂

(iii) ArNO₂

(iv) ArCH₂NH₂

Ans. (ii) ArCONH₂

Explanation: Hoffmann developed a method for preparation of primary amines by treating an amide with bromine in an aqueous or ethanolic solution of sodium hydroxide. In this degradation reaction, migration of an alkyl or aryl group takes place from carbonyl carbon of the amide to the nitrogen atom.