

**8. In the hydroboration – oxidation reaction of propene with diborane,  $H_2O_2$  and NaOH, the organic compound formed is :**

(1)  $CH_3CH_2CH_2OH$

(2)  $(CH_3)_3COH$

(3)  $CH_3CHOHCH_3$

(4)  $CH_3CH_2OH$

**Solution:**

The hydroboration–oxidation reaction is a two-step hydration reaction that converts an alkene into alcohol. It is an anti-Markovnikov reaction. The organic compound formed in the hydroboration – oxidation reaction of propene with diborane,  $H_2O_2$  and NaOH is  $CH_3CH_2CH_2OH$ .

Hence option (1) is the answer.