➡ Activation energy of a chemical reaction can be determined by [CBSE PMT 1998; AFMC 1999; BHU 2000]

A)   Changing concentration of reactants

B)   Evaluating rate constant at standard temperature

C)   Evaluating rate constants at two different temperatures

D)   Evaluating velocities of reaction at two different temperatures

Correct Answer: C
Solution :

$$\log \frac{K_2}{K_1} = \frac{E_a}{2.303R} \left[\frac{T_2 - T_1}{T_1 T_2} \right]$$