

◆ **What will be the effect of temperature on rate constant?**

Ans:

A 10^0 increase in temperature almost doubles the rate constant of a process. The Arrhenius equation, on the other hand, gives the exact temperature dependency of the rate of a chemical reaction.

$$k = Ae^{-E_a/RT}$$

Where A stands for the Arrhenius factor, also known as the frequency factor.

T stands for temperature.

The gas constant is R.

The activation energy is referred to as E_a .