

JEE MAIN CHEMICAL KINETICS — EFFECT OF CATALYST — PYQS
Max. Marks: 8
Questions: 2
Section A (MCQ) — 2 questions

- Q.1** At 27°C in presence of a catalyst, activation energy of a reaction is lowered by 10 kJ mol⁻¹. The logarithm of ratio of $\frac{k \text{ (catalysed)}}{k \text{ (uncatalysed)}}$ is....

(Consider that the frequency factor for both the reactions is same)

[JEE Main 2026 (Online) 24th January Morning Shift]

- (1) 1.741 (2) 0.1741 (3) 17.41 (4) 3.482

Scan or tap for the
full solution



- Q.2** For $A_2 + B_2 \rightleftharpoons 2AB$
 E_a for forward and backward reaction are 180 and 200 kJ mol⁻¹ respectively.
 If catalyst lowers E_a for both reactions by 100 kJ mol⁻¹.

Which of the following statement is correct?

[JEE Main 2025 (Online) 4th April Morning Shift]

- (1) Catalyst does not alter the Gibbs energy change of a reaction.
 (2) The enthalpy change for the reaction is +20 kJ mol⁻¹.
 (3) Catalyst can cause non-spontaneous reactions to occur.
 (4) The enthalpy change for the catalysed reaction is different from that of uncatalysed reaction.

Scan or tap for the
full solution


ANSWER KEY

Ques.	1	2									
Ans.	1	1									