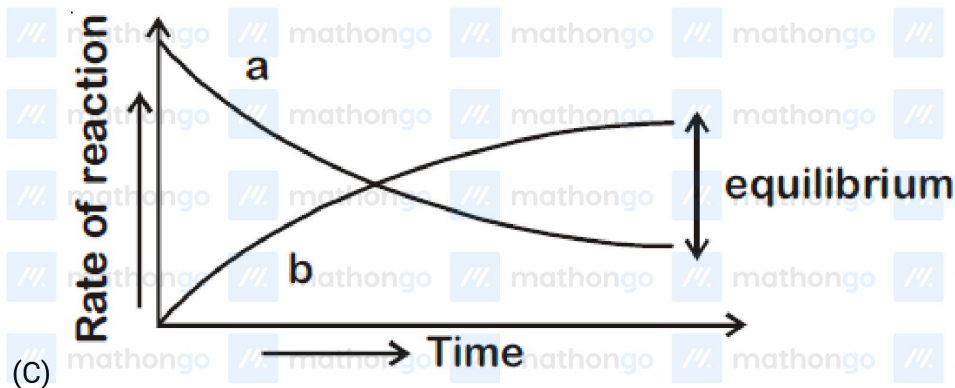
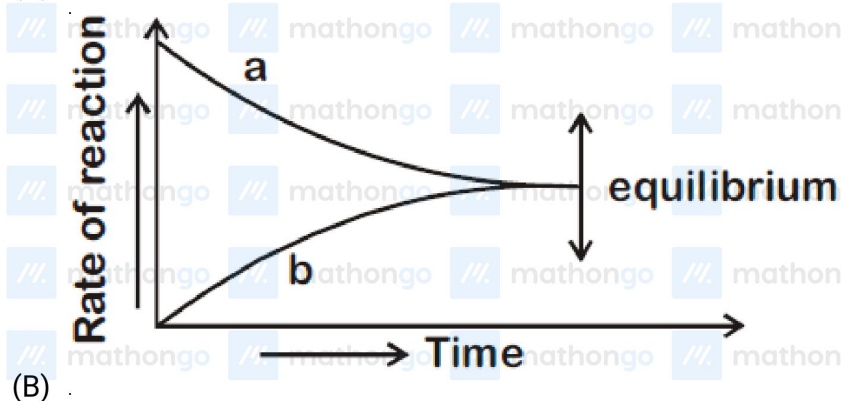
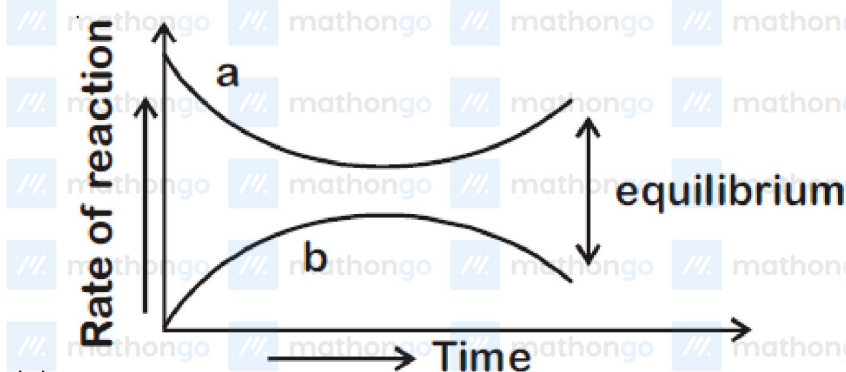
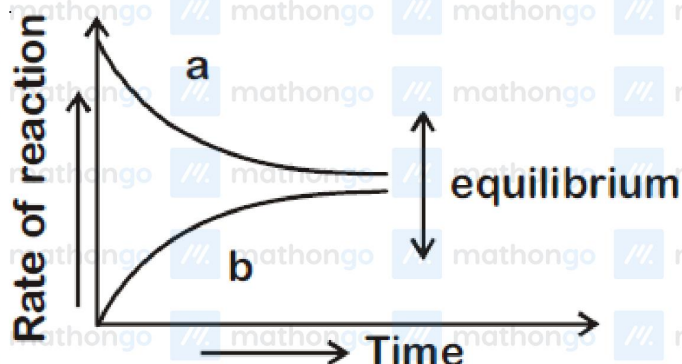


Q1 JEE Main 2020 - 4 September (Morning)

For the equilibrium $A \rightleftharpoons B$, the variation of the rate of the forward (a) and reverse (b) reaction with time is given by

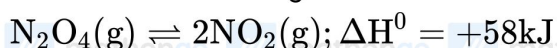




(D)

Q2 JEE Main 2020 - 5 September (Morning)

Consider the following reaction :



For each of the following cases (*a*, *b*), the direction in which the equilibrium shifts is:

- (a) Temperature is decreased
- (b) Pressure is increased by adding N_2 at constant T.

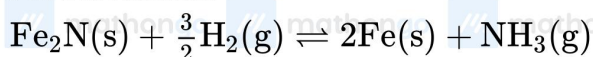
- (A) (a) Towards product, (b) towards reactant
- (B) (a) Towards reactant, (b) no change
- (C) (a) Towards reactant, (b) towards product
- (D) (a) Towards product, (b) no change

Q3 JEE Main 2020 - 5 September (Evening)

For a reaction $X + Y \rightleftharpoons 2Z$, 1.0 mol of *X*, 1.5 mol of *Y* and 0.5 mol of *Z* were taken in a 1 L vessel and allowed to react. At equilibrium, the concentration of *Z* was 1.0 mol L^{-1} . The equilibrium constant of the reaction is $\frac{x}{15}$. The value of *x* is

Q4 JEE Main 2020 - 6 September (Morning)

For the reaction



- (A) $K_C = K_p(\text{RT})^{1/2}$
- (B) $K_C = K_p(\text{RT})$

Chemical Equilibrium

Questions with Answer Keys

JEE Main 2020 Chapterwise

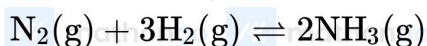
Chemistry

(C) $K_C = K_p(RT)^{3/2}$

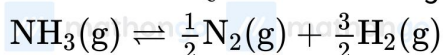
(D) $K_C = K_p(RT)^{-1/2}$

Q5 JEE Main 2020 - 6 September (Evening)

The value of K_c is 64 at 800K for the reaction



The value of K_c for the following reaction is



(A) $1/8$

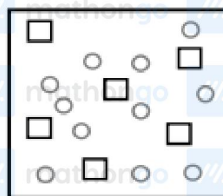
(B) $1/64$

(C) 8

(D) $1/4$

Q6 JEE Main 2020 - 9 January (Evening)

In the Figure shown below reactant A (represented by square) is in equilibrium with product B



(represented by circle). The equilibrium constant is:

(A) 4

(B) 8

(C) 1

(D) 2

Answer Key

Q1 (B)

Q2 (B)

Q3 (16)

Q4 (A)

Q5 (A)

Q6 (D)