

PART 1 - CHEMISTRY

Topic : Chemical kinetics

SECTION-A : (Maximum Marks : 4)

This section contains **ONE** question.

Each question has **FOUR** options (A), (B), (C) and (D). **ONLY ONE** of these four options is the correct answer.

For each question, choose the option corresponding to the correct answer.

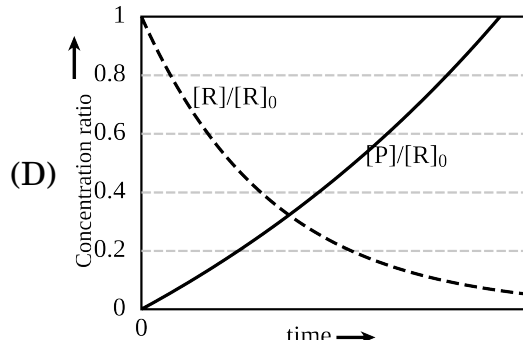
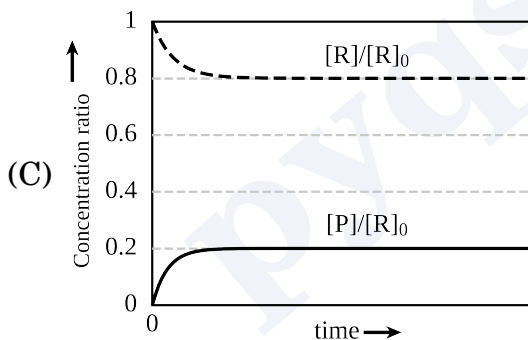
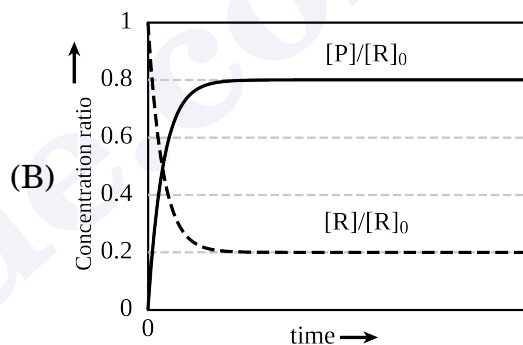
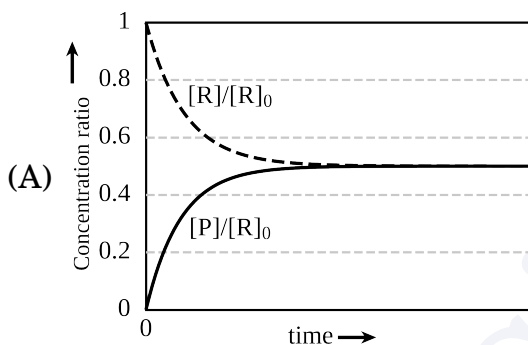
Answer to each question will be evaluated according to the following marking scheme :

Full Marks : +4 If **ONLY** the correct option is chosen;

Zero Marks : 0 If none of the options is chosen (i.e. the question is unanswered);

Negative Marks : -1 In all other cases.

1. For a reversible reaction $R \rightleftharpoons P$, at constant temperature, both the forward and the backward reactions are first order elementary reactions with rate constants k_f and k_b , respectively. At time zero, the concentration of R is $[R]_0$ and the concentration of P is zero. At any given time, $[R]$ and $[P]$ are the concentrations of R and P, respectively. If $k_b = 4k_f$, the correct graphical representation of the reaction is [JEE Advanced 2026 Paper 1]



Scan or tap for the full solution



Space for Rough Work

**JEE ADVANCED CHEMICAL KINETICS —
REVERSIBLE FIRST-ORDER REACTIONS — PYQS**

Test Pattern : **JEE (Advanced)**

ANSWER KEY

[illegible]