

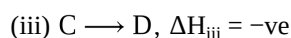
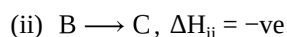
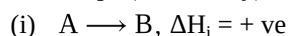
JEE MAIN CHEMICAL KINETICS — REACTION MECHANISM, TRANSITION STATE, INTERMEDIATE AND ENERGY PROFILE DIAGRAM — PYQS

Max. Marks: 12

Questions: 3

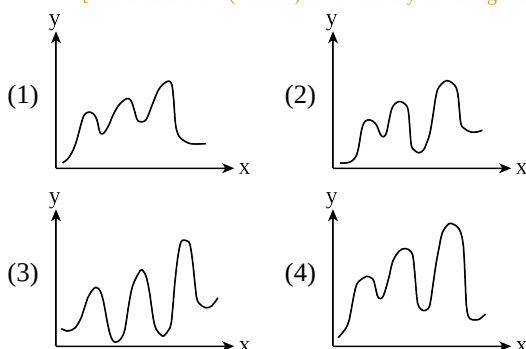
Section A (MCQ) — 3 questions

Q.1 $A \longrightarrow D$ is an endothermic reaction occurring in three steps (elementary).



Which of the following graphs between potential energy (y-axis) vs reaction coordinate (x-axis) correctly represents the reaction profile of $A \longrightarrow D$?

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



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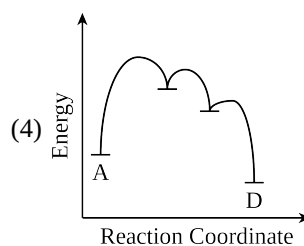
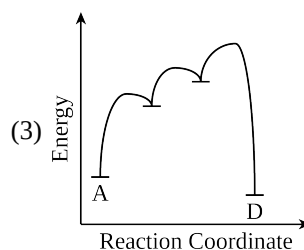
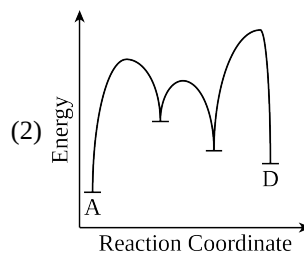
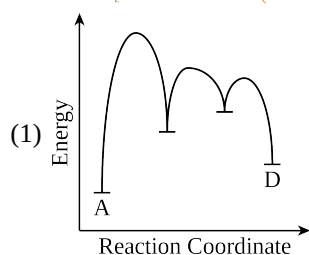


Q.2 Reactant A converts to product D through the given mechanism (with the net evolution of heat):



Which of the following represents the above reaction mechanism?

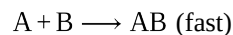
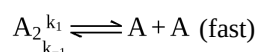
[JEE Main 2025 (Online) 2nd April Evening Shift]



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Q.3 The reaction $A_2 + B_2 \longrightarrow 2AB$ follows the mechanism:



The overall order of the reaction is:

[JEE Main 2025 (Online) 29th January Morning Shift]

- (1) 3 (2) 2.5 (3) 1.5 (4) 2

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2	3																
Ans.	4	4	3																