

PYQSide

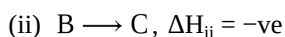
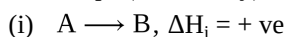
JEE MAIN CHEMICAL KINETICS — REACTION MECHANISM, TRANSITION STATE, INTERMEDIATE AND ENERGY PROFILE DIAGRAM — PYQS

Max. Marks: 12

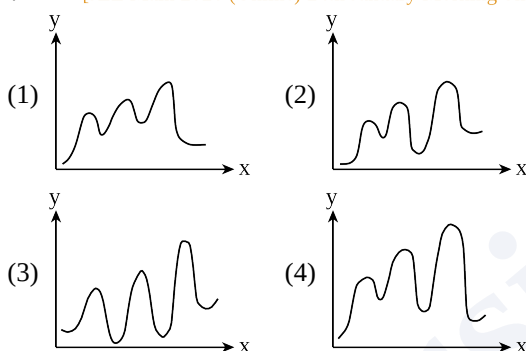
Questions: 3

Section A (MCQ)

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



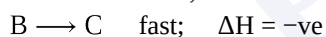
Which of the following graphs between potential energy (y-axis) vs reaction coordinate (x-axis) correctly represents the reaction profile of $A \longrightarrow D$? [JEE Main 2026 (Online) 24th January Morning Shift]



Scan or tap for the full solution

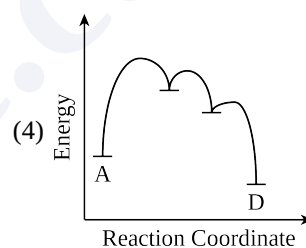
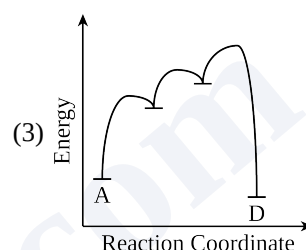
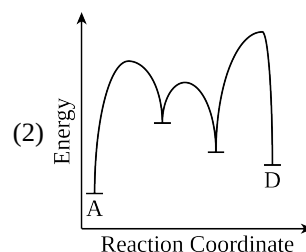
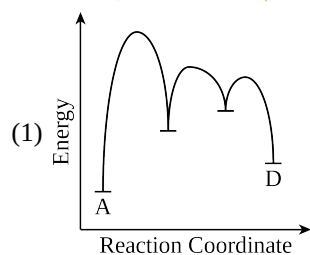


Q.2 Reactant A converts to product D through the given mechanism (with the net evolution of heat):



Which of the following represents the above reaction mechanism?

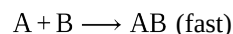
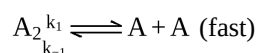
[JEE Main 2025 (Online) 2nd April Evening Shift]



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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								