

PART 1 - CHEMISTRY

Topic : Thermodynamics

SECTION-1 : (Maximum Marks : 4)

- This section contains **ONE** question.
- Each question has **TWO** lists: **List-I** and **List-II**.
- Four options are given representing matching of elements from List-I and List-II. **ONLY ONE** of these four options corresponds to a correct matching.
- 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. **List-I** contains various physical/chemical processes, and **List-II** contains combinations of changes in enthalpy (ΔH) and entropy (ΔS). Match each entry in **List-I** to the appropriate entry in **List-II**, and choose the correct option.
- [JEE Advanced 2026 Paper 1]

List-I		List-II	
P.	Physisorption	1.	$\Delta H > 0$ and $\Delta S > 0$
Q.	Diamond $\longrightarrow$ Graphite	2.	$\Delta H < 0$ and $\Delta S < 0$
R.	Denaturation of protein	3.	$\Delta H < 0$ and $\Delta S = 0$
S.	Propene $\longrightarrow$ Cyclopropane	4.	$\Delta H > 0$ and $\Delta S < 0$
		5.	$\Delta H < 0$ and $\Delta S > 0$

(A) P $\rightarrow$ 2; Q $\rightarrow$ 3; R $\rightarrow$ 5; S $\rightarrow$ 4(B) P $\rightarrow$ 4; Q $\rightarrow$ 3; R $\rightarrow$ 5; S $\rightarrow$ 1(C) P $\rightarrow$ 2; Q $\rightarrow$ 5; R $\rightarrow$ 1; S $\rightarrow$ 4(D) P $\rightarrow$ 2; Q $\rightarrow$ 5; R $\rightarrow$ 1; S $\rightarrow$ 3

Scan or tap for the full solution



Space for Rough Work

JEE ADVANCED THERMODYNAMICS — SIGNS OF ΔH AND ΔS — PYQS

Test Pattern : JEE (Advanced)

ANSWER KEY

SECTION-1																											
Ques.	1																										
Ans.	C																										