

NEET EQUILIBRIUM — LE CHATELIER'S PRINCIPLE — PYQS

Max. Marks: 24

Questions: 6

Section A (MCQ) — 6 questions

Q.1 Higher yield of NO in $\text{N}_2(\text{g}) + \text{O}_2(\text{g}) \rightleftharpoons 2\text{NO}(\text{g})$ can be obtained at $[\Delta H \text{ of the reaction} = +180.7 \text{ kJ mol}^{-1}]$

- A. Higher temperature
 B. Lower temperature
 C. Higher concentration of N_2
 D. Higher concentration of O_2
 Choose the correct answer from the options given below : [NEET (UG) 2025]

- (1) B, C, D only (2) A, C, D only
 (3) A, D only (4) B, C only

 Scan or tap for the
full solution


Q.2 For the reaction in equilibrium $\text{N}_2(\text{g}) + 3\text{H}_2(\text{g}) \rightleftharpoons 2\text{NH}_3(\text{g})$, $\Delta H = -Q$
 Reaction is favoured in forward direction by:

[RE-NEET (UG) 2024]

- (1) use of catalyst
 (2) decreasing concentration of N_2
 (3) low pressure, high temperature and high concentration of ammonia
 (4) high pressure, low temperature and higher concentration of H_2

 Scan or tap for the
full solution


Q.3 For the reaction $\text{N}_2(\text{g}) + 3\text{H}_2(\text{g}) \rightleftharpoons 2\text{NH}_3(\text{g})$, $\Delta H = -92.4 \text{ kJ mol}^{-1}$. The yield of ammonia increases on

[NEET (UG) 2022]

- (1) increasing temperature
 (2) decreasing pressure
 (3) increasing pressure
 (4) adding a catalyst

 Scan or tap for the
full solution


Q.4 Which one of the following conditions will favour maximum formation of the product in the reaction $\text{A}_{2(\text{g})} + \text{B}_{2(\text{g})} \rightleftharpoons \text{X}_{2(\text{g})}$, $\Delta_r H = -X \text{ kJ}$? [NEET 2018]

- (1) Low temperature and high pressure
 (2) Low temperature and low pressure
 (3) High temperature and high pressure
 (4) High temperature and low pressure

 Scan or tap for the
full solution


Q.5 For the reversible reaction,
 $\text{N}_2(\text{g}) + 3\text{H}_2(\text{g}) \rightleftharpoons 2\text{NH}_3(\text{g}) + \text{heat}$
 The equilibrium shifts in forward direction

[AIPMT 2014]

- (1) by increasing the concentration of $\text{NH}_{3(\text{g})}$
 (2) by decreasing the pressure
 (3) by decreasing the concentrations of $\text{N}_{2(\text{g})}$ and $\text{H}_{2(\text{g})}$
 (4) by increasing pressure and decreasing temperature.

 Scan or tap for the
full solution


Q.6 The value of ΔH for the reaction $\text{X}_2(\text{g}) + 4\text{Y}_2(\text{g}) \rightleftharpoons 2\text{XY}_4(\text{g})$ is less than zero. Formation of $\text{XY}_4(\text{g})$ will be favoured at

[AIPMT 2011 (Prelims)]

- (1) high temperature and high pressure
 (2) low pressure and low temperature
 (3) high temperature and low pressure
 (4) high pressure and low temperature

 Scan or tap for the
full solution


ANSWER KEY

Ques.	1	2	3	4	5	6					
Ans.	2	4	3	1	4	4					