

PYQSide

NEET EQUILIBRIUM — LE CHATELIER'S PRINCIPLE — PYQS

Max. Marks: 24

Questions: 6

Section A (MCQ)

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					