

NEET EQUILIBRIUM — ACID–BASE CONCEPTS (ARRHENIUS, BRØNSTED–LOWRY, LEWIS) — PYQS

Max. Marks: 36

Questions: 9

Section A (MCQ) — 9 questions

Q.1 Amongst the given options which of the following molecules/ion acts as a Lewis acid?

[NEET (UG) 2023]

- (1) H_2O (2) BF_3 (3) OH^- (4) NH_3

Scan or tap for the full solution



Q.2 Conjugate base for Brønsted acids H_2O and HF are :

[NEET (UG) 2019]

- (1) OH^- and F^- , respectively
 (2) H_3O^+ and H_2F^+ , respectively
 (3) OH^- and H_2F^+ , respectively
 (4) H_3O^+ and F^- , respectively

Scan or tap for the full solution



Q.3 Which of the following fluoro-compounds is most likely to behave as a Lewis base ?

[NEET 2016 (Phase 2)]

- (1) BF_3 (2) PF_3 (3) CF_4 (4) SiF_4

Scan or tap for the full solution



Q.4 Which of these is least likely to act as a Lewis base ?

[NEET 2013]

- (1) BF_3 (2) PF_3 (3) CO (4) F^-

Scan or tap for the full solution



Q.5 Which of the following is least likely to behave as Lewis base?

[AIPMT 2011 (Prelims)]

- (1) H_2O (2) NH_3 (3) BF_3 (4) OH^-

Scan or tap for the full solution



Q.6 Which of the following molecules acts as a Lewis acid?

[AIPMT 2009]

- (1) $(\text{CH}_3)_2\text{O}$ (2) $(\text{CH}_3)_3\text{P}$ (3) $(\text{CH}_3)_3\text{N}$ (4) $(\text{CH}_3)_3\text{B}$

Scan or tap for the full solution



Q.7 Conjugate acid of NH_2^- is

[AIPMT 2000]

- (1) NH_4OH (2) NH_4^+ (3) NH_2^- (4) NH_3

Scan or tap for the full solution



Q.8 Which one of the following ionic species has the greatest proton affinity to form stable compound?

[AIPMT 2007]

- (1) NH_2^- (2) F^- (3) I^- (4) HS^-

Scan or tap for the full solution



Q.9 In HS^- , I^- , R-NH_2 , NH_3 order of proton accepting tendency will be

[AIPMT 2001]

- (1) $\text{I}^- > \text{NH}_3 > \text{R-NH}_2 > \text{HS}^-$
 (2) $\text{NH}_3 > \text{R-NH}_2 > \text{HS}^- > \text{I}^-$
 (3) $\text{R-NH}_2 > \text{NH}_3 > \text{HS}^- > \text{I}^-$
 (4) $\text{HS}^- > \text{R-NH}_2 > \text{NH}_3 > \text{I}^-$

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2	3	4	5	6	7	8	9		
Ans.	2	1	2	1	3	4	4	1	3		