

# 18.1 Further Aspects of Acids & Bases

## Question Paper

Course	DPIB Chemistry
Section	18. Acids & Bases (HL only)
Topic	18.1 Further Aspects of Acids & Bases
Difficulty	Easy

**Time allowed:** 10  
**Score:** /5  
**Percentage:** /100

### Question 1

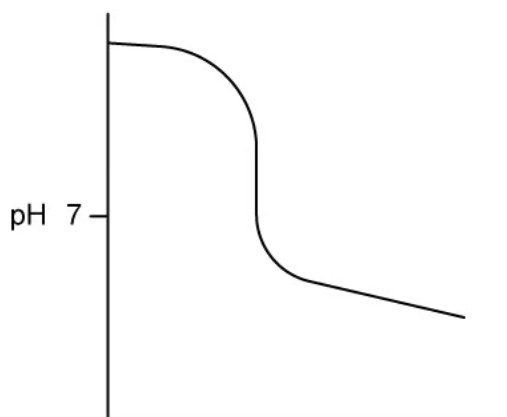
Which definition of a Lewis acid is correct?

- A. Electron pair donor
- B. Electron pair acceptor
- C. Proton donor
- D. Proton acceptor

[1 mark]

### Question 2

Which type of titration is indicated by the following pH curve?

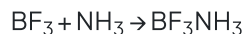


- A. Strong acid - strong base
- B. Weak acid - weak base
- C. Strong acid - weak base
- D. Weak acid - strong base

[1 mark]

### Question 3

Which of the following best describes ammonia,  $\text{NH}_3$ , in the following equation?



- A. Lewis acid
- B. Lewis base
- C. Coordinate bond
- D. Brønsted-Lowry acid

[1 mark]

### Question 4

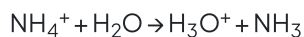
Which mixture **cannot** act as a buffer?

- A.  $\text{CH}_3\text{COOH}$  (aq) and  $\text{CH}_3\text{COONa}$  (aq)
- B.  $\text{CH}_3\text{CH}_2\text{COOH}$  (aq) and  $\text{CH}_3\text{CH}_2\text{COONa}$  (aq)
- C.  $\text{HNO}_3$  (aq) and  $\text{NaOH}$  (aq)
- D.  $\text{NH}_3$  (aq) and  $\text{NH}_4\text{Cl}$  (aq)

[1 mark]

### Question 5

The hydrolysis of ammonium chloride takes place via the following reaction.



Which of the following is correct?

- A. The resultant pH is above 7
- B. The resultant pH is 7
- C. The resultant pH is below 7
- D. Ammonium chloride is insoluble

[1 mark]