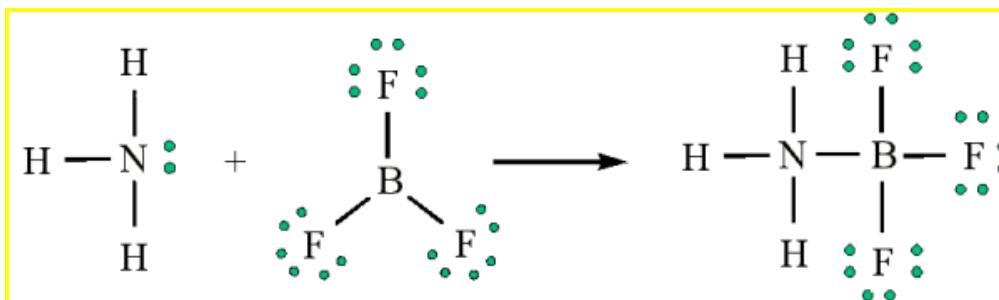


**Directions:** Choose the letter of the correct answer.

1. Which of the following does not belong to the group?

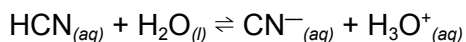
- KOH
- $\text{Ca}(\text{OH})_2$
- $\text{Mg}(\text{OH})_2$
- $\text{Al}(\text{OH})_3$

2. Considering the reaction below, which of the following is/are TRUE?



- $\text{NH}_3$  acts as a Lewis base.
- $\text{BF}_3$  acts as a Bronsted-Lowry acid.
- $\text{NH}_3$  acts as a Bronsted-Lowry base.
- All of the above
- None of the above

3. Considering the dissociation of HCN shown below, which of the following is/are TRUE?



- $\text{CN}^-$  is the conjugate acid of HCN.

- b. HCN increases the pH of the solution.
- c. Water acts as a Bronsted-Lowry acid in the forward reaction.
- d. All of the above
- e. None of the above

4. Which of the following expressions will permit us to correctly determine the pH of a 0.005 M  $\text{HNO}_3$  solution?

- a.  $\log(0.005)$
- b.  $-\log(0.005)$
- c.  $14 - \log(0.005)$
- d.  $14 + \log(0.005)$

5. The following are strong acids, EXCEPT:

- a. HI
- b. HF
- c. HBr
- d. HCl