

Hw

Q: Distinguish between the concept of knowing acids and bases on basis of Arrhenious theory and Lewis theory.

Arrhenious theory

Lewis theory

(i) According arrhenious theory acid produces H^+ ions wher dissolved in water.

(ii) According lewis theory acid produces and accepts a pair of electrons.

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| (ii) Bases forms hydroxy-ions when dissolved | (ii) Bases donate a pair of electrons according to Lewis theory. |
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Q: Although NH_3 doesn't contain any OH^- ions still it behaves as a base why?

Ans: Although NH_3 doesn't contain any OH^- ions but when dissolved in water $\text{NH}_3 + \text{H}_2\text{O} \rightarrow \text{NH}_4\text{OH}$ which produces OH^- ions. So, NH_3 behaves as a base.

Q: What is the Ox state of K-atom in a potassium permanganate?

Ans: $\text{K}^{+1} \text{M}_n^{+7} \text{O}_4^{-2}$

So, the Ox state of potassium permanganate atom is (+1).