

i) Distinguish between the concept of knowing acids and bases on basis of Arrhenius Theory and Lewis theory

According to Arrhenius Theory acids are the chemical substances that release H^+ ions when dissolved in water.

Bases are the chemical substances that release OH^- ions when dissolved in water.

According to Lewis theory, bases are the substances that donate electrons. Acids are the substances that gains or receives electrons.

2) Although NH_3 doesn't contain any Ox^- ions. Still it behaves as base. why?

When NH_3 (ammonia) reacts with HCl NH_4^+ ions and Cl^- ions are formed.



According to Bronsted and Lowry theory substance which accepts H^+ ions are bases

Therefore, NH_3 is a base as it accepts H^+ ions.

3) What is the Ox state of K atom in potassium permanganate?



So, oxidation state of K atom is +1.