

(1) distinguish between the concept of knowing acids and bases on basis of Arrhenious Theory and Lewis theory.

ans: Arrhenious theory
 In this theory, it states that acid provides H^+ ions when dissociate with base and water produce OH^- ions when dissociate with water.

It was introduced by a Swedish scientist Svante Arrhenious in 1887.

Lewis theory
 In this theory, it states that acids reacts with base and shares a pair of e^- with no change of their oxidation numbers of an atom and hence can be classified.

It was introduced by an American chemist, N. Lewis in 1923.

(2) NH_3 doesn't have OH^- ions when dissociates with water but still behaves like a base because though NH_3 does not contain OH^- but when it dissociates with water, it produces OH^- ions because of H_2 ions present in water.

(3) The oxidation state of K atom in $KMnO_4$ is +1.