



61. (a) Because of CH_3COONa is a salt of weak acid and strong base.

62. (b) Acid $\xrightarrow{-H^+}$ conjugate base.

Base $\xrightarrow{+H^+}$ conjugate acid.

63. (b) $HCl \rightarrow Cl^-$
Acid Base

65. (a) $HClO_4 > H_2SO_4 > HCl > HNO_3$.
Acidic character decreases

66. (a) Those substances which accept the H^+ are called conjugate base.

67. (d) NH_3 is a Lewis base, which donate a lone pair of electron.

68. (c) (i) Correct and (ii) Wrong

Explanation (Simple & Clear):

Statement (i):

"A strong acid has a weak conjugate base." → Correct

Strong acid dissociates completely
→ its conjugate base is very weak.

Example:

HCl (strong acid) → Cl^- (very weak conjugate base)

Statement (ii):

"An acid is an electron pair acceptor." → Wrong

This is definition of a Lewis acid.

Acid (Bronsted-Lowry) = proton donor (H^+ donor)
Lewis acid = electron pair acceptor

69. (a) $FeCl_3 + 3H_2O \rightleftharpoons Fe(OH)_3 + 3HCl$.

Strong acid have less than 7 pH.

70. (b) It donates their e^- pair.

71. (b) The strength of the acid will depend upon the proton donation.

72. (d) Coordinate covalent bond formation

Explanation:

In Lewis acid-base theory:

Lewis acid = electron pair acceptor

Lewis base = electron pair donor

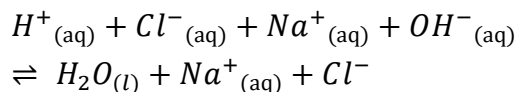
When they react, a coordinate covalent bond is formed between them.

This is considered neutralization in Lewis theory.



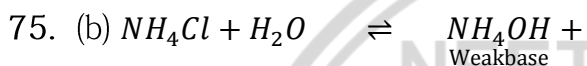
73. (b) Because it is a salt of strong acid

and strong base.



74. (d) CCl_4 is not a Lewis or bronsted

acid. It does not contain H^+ .



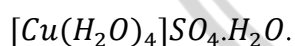
HCl . So it is acidic in nature.
Strongacid

76. (b) $Cu(II)$ complexes are blue. The

four water molecules are

attached with secondary

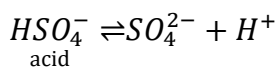
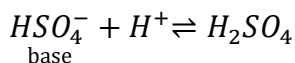
valencies of the metal atom e.g.



77. (a) The species which can accept as

well as donate H^+ can act both

as an acid and a base.



78. (a) NH_4^+ is the weakest acid. So its

conjugate base is strongest.

79. (b) Ag^+ is an electron deficient

compound and hence is a Lewis

acid.

