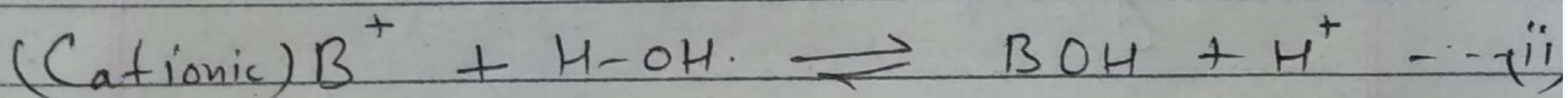
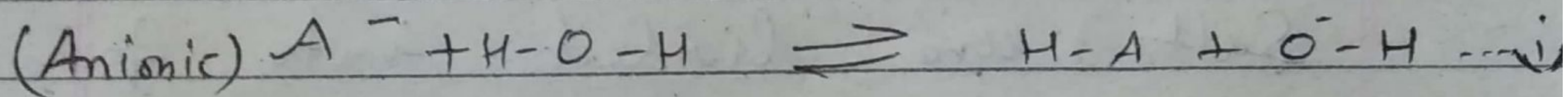


Hydrolysis :

A chemical reaction in which a water molecule reacts with a large molecule breaking the covalent bond and forming two smaller molecules.

Hydro = water

lysis = breaking

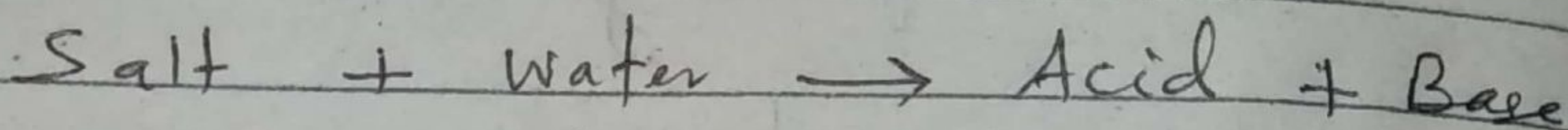


OR,

The reaction of an anion or cation with water accompanied by cleavage of O-H bond is known as hydrolysis.

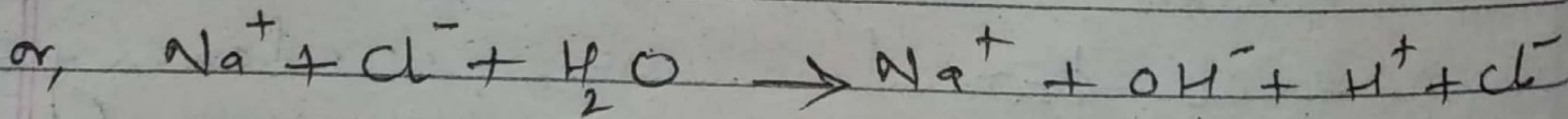
Salt hydrolysis :

The Process in which a salt reacts with water to give ~~base~~ the acid and the base.



Salts are divided into four categories :

(I) Salts of strong acids and strong bases:
Represented as:



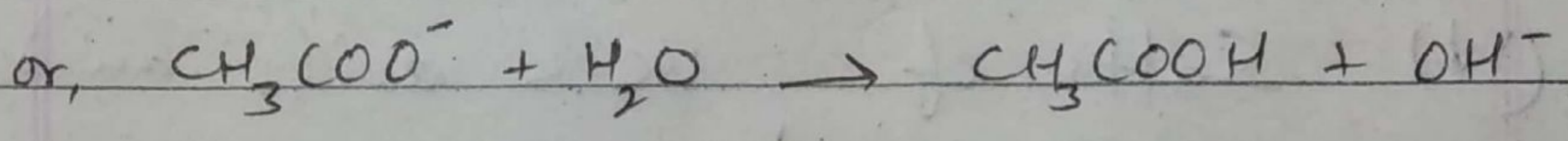
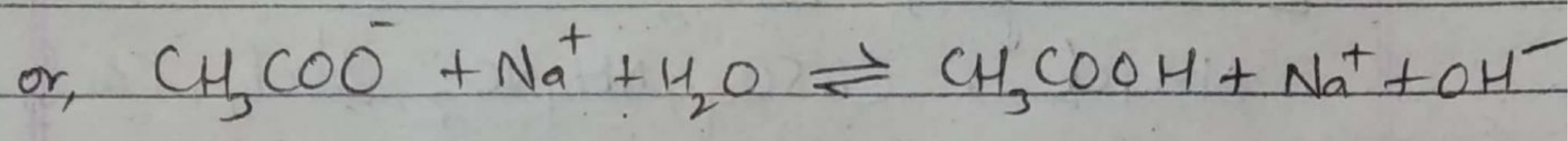
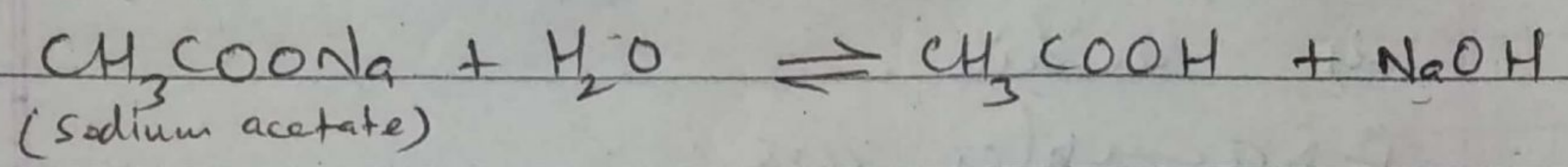
Salts of strong acids and strong bases do not undergo hydrolysis and resulting solution is neutral.

Examples are :

KCl, NaCl, NaNO₃, Na₂SO₄ etc.

(II) Salts of weak acids and strong bases

Represented as :



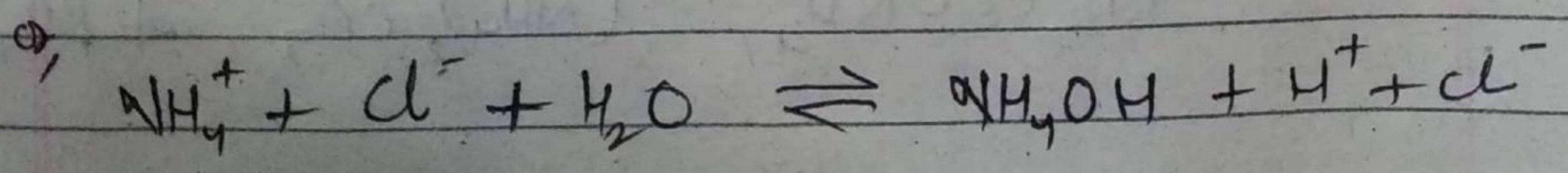
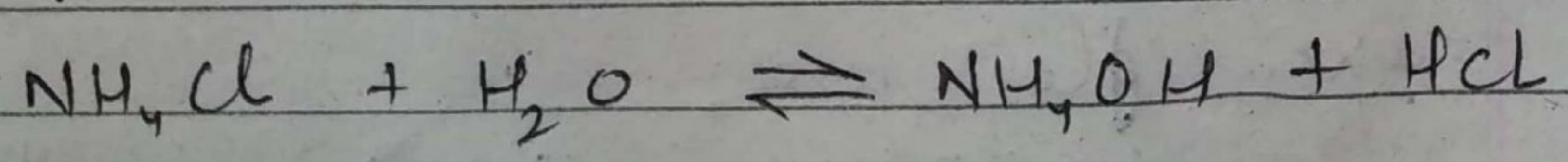
Salts of ~~strong~~^{weak} acids and strong bases produces OH⁻ ions, the solution of salt is alkaline.

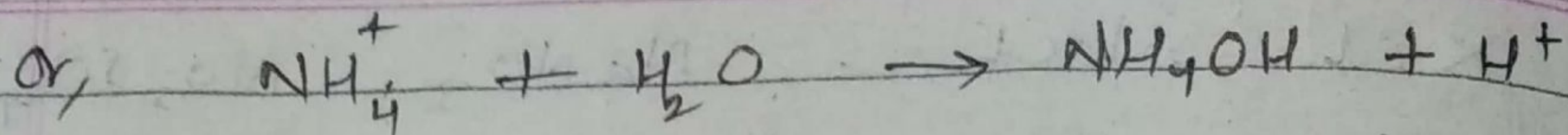
examples are :

CH₃COONa, Na₂CO₃, NaCN, K₂CO₃ etc.

(III) Salts of strong acids and weak bases

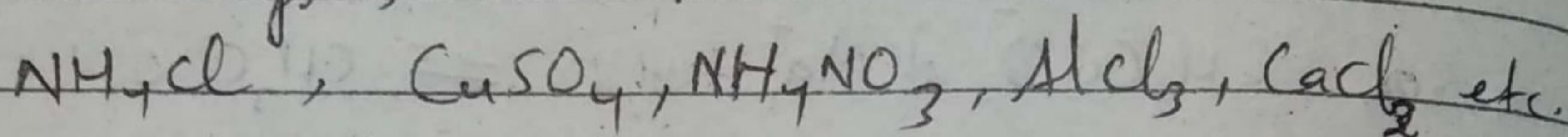
Represented as :





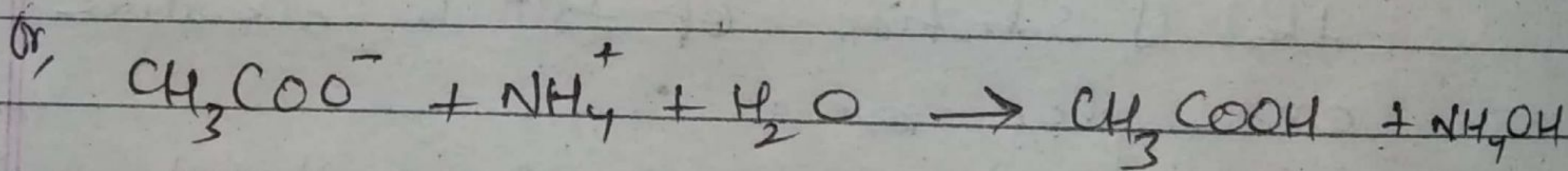
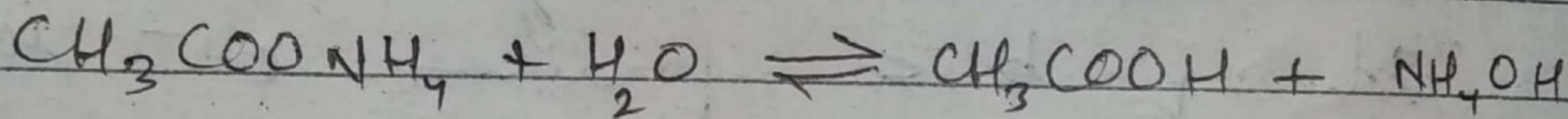
Salts of strong acids and weak bases produce H^+ ions, the solution of salt is acidic.

Examples are:



(IV) Salts of weak acids and weak bases:

Represented as:



Salts of weak acids and weak bases undergoes both cationic hydrolysis and anionic hydrolysis hence the resulting solution is neutral.

examples are:

