

M9 Check-In activity

Answer the following question briefly:

1. Why do we need to calibrate the pH meter before using?

Calibration of the pH meter is a vital step before using a pH meter due to how the electrode shifts over time. Regularly calibrating your pH meter will adjust your electrode based on any changes that may have occurred and ensures that your readings are accurate and repeatable.

2. Why distilled water is used in washing the electrodes after testing each sample?

When an acidic and basic sample is tested using pH meter, the protons present in the solution gets stuck to it. Washing with distilled water eliminates these protons so that it does not show incorrect results in the next measurement.

3. Compare the pH value of the following compounds:

- a. Acetic acid and monochloroacetic acid

The pH value of acetic acid is 2.4 pH value whereas the monochloroacetic acid has 7.1-7.3 pH value. Hence, acetic acid is acid and monochloroacetic acid is neutral when it comes to pH level.

- b. Acetamide and acetone

Acetone is acidic and Acetamide is a base because the Acetamide has a higher pH reading than acetone.

- c. Glycine and lysine

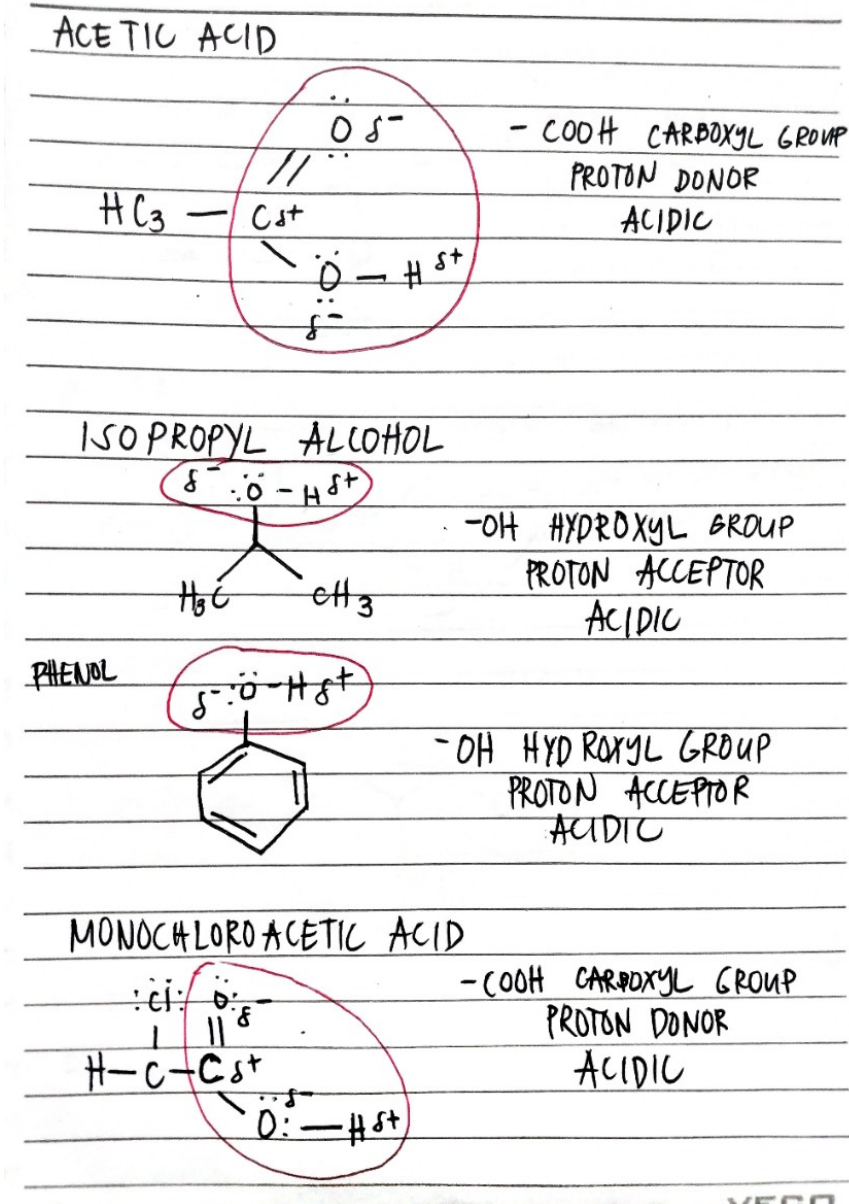
The lysine is 10.5 pH level base while glycine is 5.54 pH level acid.

- d. Isopropyl alcohol and phenol

Phenol has a 6 pH value and it's stronger than Isopropyl alcohol because it has a 5.5 pH value. Thus, the pH for Phenol is less than Isopropyl alcohol.

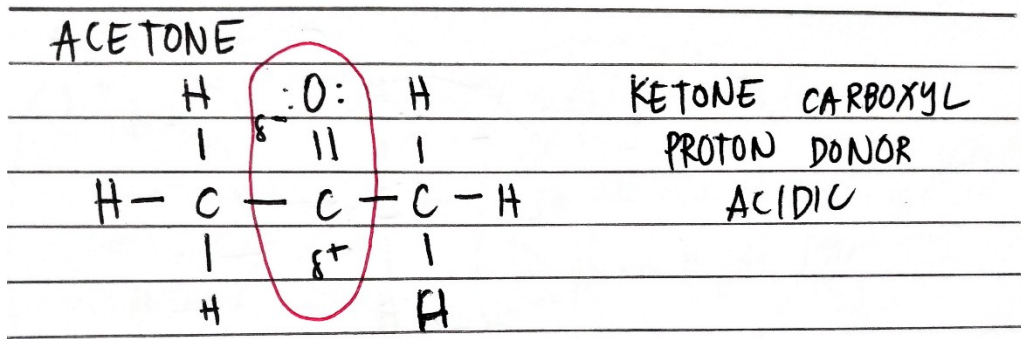
4. Which of the following sample above are classified as stated below. Support your answer by writing the structural formula and encircling the part that makes it acidic, basic or neutral as the case may be:

a. Bronsted acid

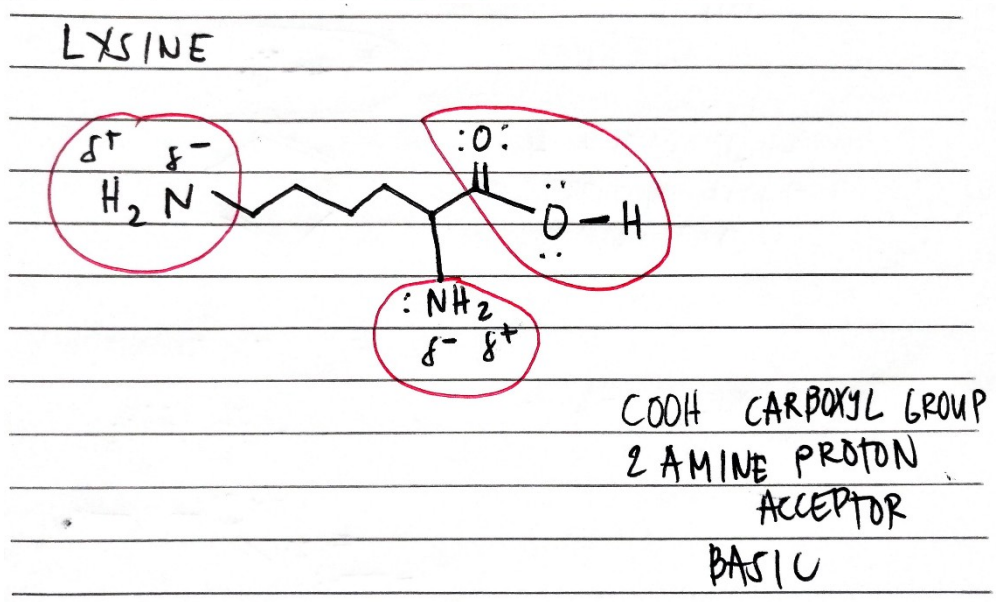
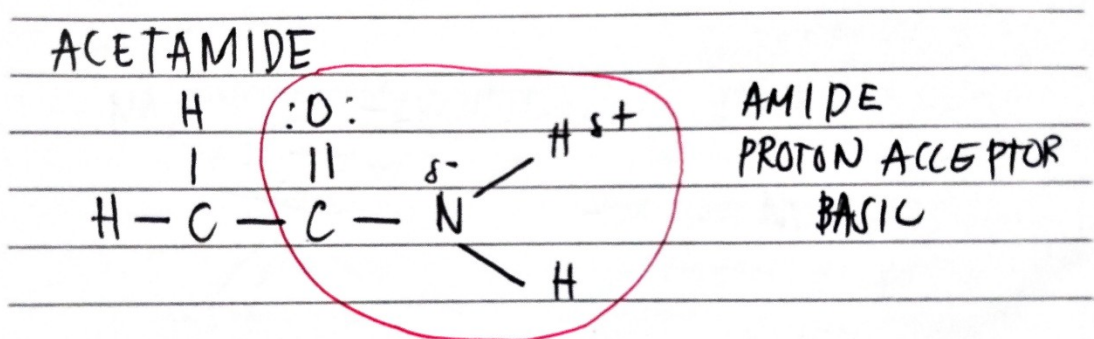


b. Bronsted base-None

c. Lewis acid



d. Lewis base



e. neutral

