

• Experiment Name: Properties of Acids and Bases.

• Aim: To determine the reactivity of the following samples by using litmus solution.

• Apparatus required: Samples, blue litmus solution, red litmus solution, Dropper, zinc dust, phenolphthalein etc.

• Procedure:

\* Litmus Solution (For Acid and Base)

1. The sample from the beaker is taken in the test tube and treated with blue litmus solution, the colour change, if any, is noted.
2. Again, the same sample is taken in a fresh test tube and treated with red litmus solution. The colour change is noted.

\* Zinc Metal (For Acid and Base)

1. The sample from the beaker is taken in the test tube and treated with pieces of zinc metal and any gas evolved or any other change is noted.

\* Solid  $\text{Na}_2\text{CO}_3$  (For Base)

1. The sample from the beaker is taken in the test tube and treated with a pinch of sodium carbonate. Any gas evolved is noted. (effervescence)

• Result:

The properties of acids and bases are tested and studied.

Teacher's Signature \_\_\_\_\_

• Observation:

Sample No.	Litmus Test	With Zinc dust	Inference
	Changes To	Hydrogen gas is evolved and burns with a pop sound/No gas evolution.	The given sample is acid / base.
1.	Red	Hydrogen gas is evolved and burns with a pop sound.	The given sample is an acid.
3.	Blue	Hydrogen gas is evolved and burns with a pop sound.	The given sample is a base.
5.	Red	Hydrogen gas is evolved and burns with a pop sound.	The given sample is an acid.
7.	Red	Hydrogen gas is evolved and burns with a pop sound.	The given sample is an acid.