

## Precipitation of Proteins

### Experiment No.(1) Precipitation of proteins using heat and pH effect:

#### Materials:

1. Proteins solutions (albumin, casein, biotin) of 0.5%. Where casein is dissolved in a dilute solution of NaOH while albumin and biotin are dissolved in saline solution.
2. Hydrochloric acid (1N).
3. Sodium hydroxide (1N).

#### Procedure:

1. Add 5mL of protein solution in three test tubes.
2. Add to the first test tube 0.5mL HCl, add to the second test tube 0.5mL water, and add to the third test tube 0.5mL NaOH.
3. Put the three test tubes in a boiling water bath for 10 minutes. Then let them cool at room temperature.
4. Neutralize the acidic and basic contents of the test tubes.
5. Write down notes on the results.

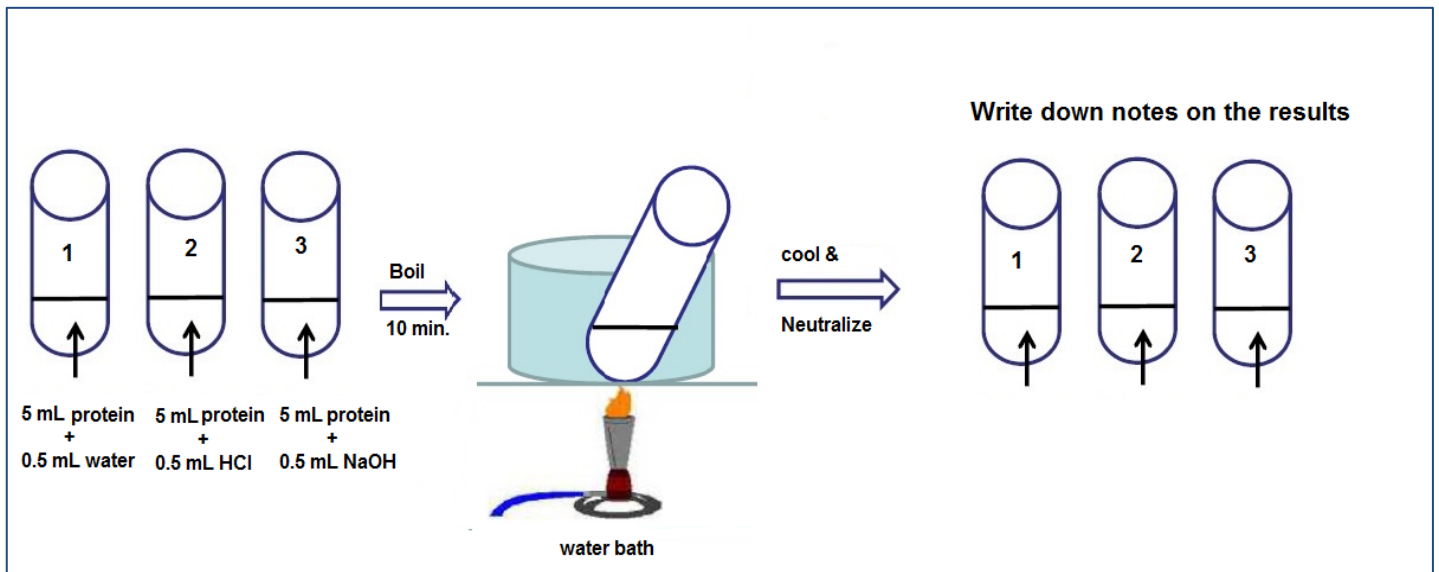


Figure 6. Precipitation of proteins using heat and pH effect.