



**Delhi Public School Guwahati**  
"Under the aegis of the Delhi Public School Society, Delhi"

**CHEMISTRY**  
**SUMMER VACATION HOLIDAY HOMEWORK**

To write the following experiments in lab file.

Class: X

List of experiments:

1. Finding the pH of the following samples by using pH paper/universal indicator:
  - a. Dilute Hydrochloric Acid
  - b. Dilute NaOH solution
  - c. Dilute Ethanoic Acid solution
  - d. Lemon juice
  - e. Water
  - f. Dilute Hydrogen Carbonate solution
2. Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with:
  - a. Litmus solution (Blue/Red)
  - b. Zinc metal
  - c. Solid sodium carbonate

Unit-I:(Chapter-2)

Performing and observing the following reactions and classifying them into:

- a. Combination reaction
- b. Decomposition reaction
- c. Displacement reaction
- d. Double displacement reaction
  - i. Action of water on quicklime
  - ii. Action of heat on ferrous sulphate crystals
  - iii. Iron nails kept in copper sulphate solution
  - iv. Reaction between sodium sulphate and barium chloride solutions.

Unit-I:(Chapter-1)

3. Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions:

- a.  $\text{ZnSO}_4(\text{aq})$
- b.  $\text{FeSO}_4(\text{aq})$
- c.  $\text{CuSO}_4(\text{aq})$
- d.  $\text{Al}_2(\text{SO}_4)_3(\text{aq})$

4. Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result.

Unit-I :(Chapter-3)