

WORK SHEET-1

1. You have two solutions, A and B. The pH of solution A is 1 and pH of solution B is 14. Which solution has more hydrogen ion concentration? Which of this is acidic and which one is basic?
2. Why do HCl, H₂SO₄, etc., show acidic characters in aqueous solutions while solutions of compounds like alcohol and glucose do not show acidic character?
3. Why does an aqueous solution of an acid or base conduct electricity?
4. How can we increase concentration of H⁺(aq) ions in a solution?
5. Why does dry HCl gas not change the colour of the dry litmus paper but changes to red when it is moist?
6. What precaution one must keep while diluting an acid and why?
7. What is the concentration of hydronium ions (H₃O⁺) affected when a solution of an acid is diluted?
8. Explain the role of water in the ionization of acids and bases.
9. Which indicator is used to find out the strength of an acid or base? How?
10. Fill in the following blanks with suitable words
 - a) Acid have pH _____ than 7
 - b) Bases have a pH _____ than 7
 - c) Neutral substance have a pH of _____
 - d) The more acidic a solution, the _____ the pH.
 - e) The more alkaline a solution, the _____ the pH.
 - f) Mixing an acid or base with water results in _____ in the concentration of ions (H₃O⁺/OH⁻) per unit volume
 - g) Higher the hydronium ion concentration, _____ is the pH value.
 - h) When pH of mouth falls below _____, the acids produced in the mouth attack enamel causing tooth cavities.
 - i) _____ is present in the bee stings which can be neutralised by applying a mild base such as _____.
 - j) Distilled water will produce a _____ colour with universal indicator.
