1. Name the acid-base indicator extracted from Lichen.
2. What colour do the following indicators turn when added to an acid?
   (a) Litmus (b) Phenolphthalein (c) Methyl orange
3. Name the acids present in (i) Vinegar (ii) Orange
4. A solution reacts with crushed egg-shell to give a gas that turns lime water milky. The solution contains:
   (a) NaCl (b) HCl (c) LiCl (d) KCl
5. What is an indicator? Name any two indicator.
6. A metal X reacts with dilute sulphuric acid to form a gas Y which burns with a 'pop' sound making a little explosion. If one of the compounds formed is zinc sulphate:
   (a) Name the metal X
   (b) Name the gas Y
   (c) Write a balanced chemical equation of metal X with dilute sulphuric acid.
7. Explain why, while diluting an acid, the acid should be added to water and not water to the acid.
8. You have been provided with three test-tubes. One of them contains distilled water and the other two contain an acidic solution and a basic solution, respectively. If you are given only red litmus paper, how will you identify the contents of each test-tube?
9. How is the concentration of hydroxide ion (OH^-) affected when excess of base is dissolved in a solution of sodium hydroxide?
10. Name the substance which on treatment with chlorine yields bleaching powder.
11. In addition to sodium hydrogen carbonate ($NaHCO_3$) baking powder contains a substance X. Name the substance X.
12. What happens when blue crystals of $CuSO_4$ are heated?
13. What does the pH of a solution signify? Explain your answer.
14. Fresh milk has a pH of 6. How do you think the pH will change as it turns into curd? Explain your answer.
15. What is a universal indicator? For what purpose it is used?
16. Explain why plaster of paris should be stored in a moisture proof container?
17. What is a neutralization reaction? Explain with an example.
18. Why does distilled water not conduct electricity whereas rain water does?