

1. What is the difference between an acid and a base?
2. How will you differentiate between the strength of an acid and concentration of an acid?
3. What happens when CO_2 is passed through lime water in –
 - (a) Small quantity
 - (b) In excess
4. What happens to an acid or base in water solution?
5. **Write balanced symbol equations for the following-**
 - (a) Metal hydrogen carbonate with hydrochloric acid.
 - (b) Magnesium oxide with sulphuric acid.
 - (c) Sodium hydroxide with zinc.
 - (d) Zinc with sulphuric acid
 - (e) Calcium carbonate with hydrochloric acid.
6. What is pH scale? What is pH of a neutral solution? What happens when pH value of a solution is increased from 7 to 14?
7. Compare diamond and graphite and draw its structure.
8. Draw the structure of Benzene and Cyclohexane.
9. **Explain the following terms-**
Catenation
Homologous series
10. What is the difference between Calcination and Roasting(Give equations)
11. **Give reasons:**
 - (i) Iron is used in constructing bridges and houses.
 - (ii) Aluminium is used for making electrical wires.
 - (iii) Sulphur is counted as non-metal.
12. A metal that exists as liquid at room temperature is obtained by heating its sulphide in the presence of air, Identify the metal and its ore and give the reactions involved.
13. Draw electron dot structure of Ethyne and Carbon tetrachloride.
14. Write structural formula and any two isomers of hexane.
15. What happens when nitric acid is added to egg shell?